A REVIEW

OF THE REPORT AND RECOMMENDATIONS

OF

THE UNIVERSITIES COMMISSION.

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There can hardly he any doubt that the one question of vital importance in which the best friends of India feel deeply interested at this moment, is the report of the Universities Commission, and it is with no common trepidation that educated India waits to know the line of action Lord Curzon's Government intends to take in regard to the uncommonly numerous recommendations, on major and minor points, they have made, and made with such an air of confidence and infallibility. been announced that the Government Resolution on the subject will be issued in the course of a few weeks. It is necessary that Bombay should speak out its mind, before Government finally commit themselves, and we, for one, do not think it quite easy to explain away the unconsciouably long time, the constituted exponents of public opinion, on this side of India, are taking to formulate their views on the subject. Delay and deliberation have, bowever, their value. It is something to let the first passions cool down, so that calm judgment and unbiassed reason may have their sway. Sober and cautions Bombay may be thereby the better able to screen hersell from the charges of personal interest and impassioned impulsiveness, which have been held to vitiate the scathing criticism which has been evoked on the subject in Bengal,

and amongst the native leaders of thought in Madras too. We, in Bom. bay, are fortunately so circumstanced as to be able to wait and judge and dispassionately view the pros and cons of the subject. But the more we think, the more keenly do we feel that at least one set of the recommendations of the Commission must, if given effect to, deal a disastrous blow to the cause of higher education, the evil effects of which may never be cured. This is the growing conviction even amongst the most sober and impartial leaders of public thought amongst us, -even amongst those, who belong to no party, who have no personal vested interest at stake and who are above the very suspicion of being influenced by anything like a "cancus," It is with a view to give separate expression to the views of this large section of the thinking public, on our side, that the following observations have been penned by one, who has taken pains to ascertain these views and who, as an elected Fellow of the University, claims to speak on behalf of a constituency, that yields to none in appreciating every effort " to elevate the standard of University teaching and to promote the advancement of Learning.

We, in Bombay, are by no means unwilling to give to Lord Curzon full credit for excellent intentions and noble

aspirations. We shall not hastily join hands with those who set his Lordship down for an out and out autocrat, whose sweet tongue only guilds an unbending determination to pursue a ne plus ultra policy of retrogression and repression, nor shall we take the very recommendations of the Commission as only an outward formulating of a prearranged programme of spreading the nets of that policy in the domain of education also. We shall rather fervently and confidently trust that Lord Curzon has an open mind on the subject, and that in deciding what action the Government is to take on the recommendations of the Commission. he will bring to bear on it at least that characteristic individuality and grasp of principle, which no one has yet dared to question. His Lordship is a true Conservative by training, and with his tender regard for a past, hallowed by time and sanctified by result, we expect that he will be in no haste to give a carte blanche to the daring innovators of the Universities Commission, who would almost revolutionize in regard to detail, no less than principle, the entire educational policy of the country, though it is a continuous growth of several generations and an embodiment of the wisdom learnt from varied experience. His Lordship has, besides, more than once given us the solemn assurance that he values and respects the views of the enlightened and educated classes of India, a microscopic ming-ity though they be. Well. in regard to matters of general interest to india, in regard to questions of foreign policy and internal development Government have to consult conflicting interests and bear in mind a variety of considerations, which make it impossible for them to take as guide the feelings and sentiments of educated

India alone. But this question of University reform touches closely, and touches only these educated classes. and if there be any matter in which their feelings as well as reasoned views ought to have full weight, it is surely the educational system under which they have grown up and they hope their children to grow up and thrive Lord Curson may also do well to remember that, after all, we can have his Lordship at the belm of our affairs only for a short time, and the innovations, he sanctions, will, in the main, have to be carried out by his successors. The success of innovations denends as much on the spirit in which they are carried out as on the inherent merits and principles they embody. Let his Lordship assure himself, therefore, that in whatever he sanctions, whether by means of peremptory legislation or by the scarcely less effective method of imperative executive orders, his Lordship takes due care to provide every guarantee possible against mishap and miscarriage. The best of intentions may be frustrated and the best conceived schemes may be foiled for want of proper instruments to give them effect. The danger is peculiarly great when an administrator of an exceptionably indomitable will lays down a policy, the execution of which must, as in the case of University reform, be spread over a long stretch of time, and may devolve upon persons, feebler than, or worse still, hostile to the master mind that first conceived them. We trust therefore. that, both for the sake of his own reputation and the interests of India, Lord Curson will look deep into the future and show due caution and circomspection in regard to what will surely be one of the most far-reaching measures of his eventful viceroyalty.

There are, indeed, more reasons than one, why caution and circumspection : shall be specially needed in formulating the veiws of Government on the recommendations of the Universities Commission. In the first place, the personnel of the Commission was too Bectional, too one-sided and too unrepresentative to command the universal respect and confidence either of the varied interests, directly concerned, or of the general thinking public. There was nothing like territorial representation on the Commission, and as against three executive officers of Government, were only two Principals. Whilst the missionary element had a representative, native educational enterprize was left in the cold. The literary professions as well as the educated section of the Indian community had to. content themselves only with one representative—and he too was added three weeks after the first nominations had been made! The public have yet to understand the philosophy of appointing a cooperator with the Commission, one for each province, and yet giving to him no voice whatever in the ultimate sions. No wonder that a Commission, so defectively constituted, should bring forth a one-sided report and make recommendations evoking a wide opposition from more quarters than one. To aggravate matters, the Commi. ssion speaks like an oracle, briefly but with all the air of omniscience and infallibility. "We do not propose to enter at length into a discussion of all the schemes and suggestions brought before us and we have endeavoured to exercise an independent judgment," they specifically aver at the beginning of their report. These words however express much less than they have actually. They. done.

reason and dismiss the few opposite views, they refer to, with a curt remark that they do not commend themselves to their judgment. Surely, these are not days when dogmatic assertions can be expected to be taken, for gospel truths, specially when they come from a body whose credentials fall so short of perfection as those of the onesided and non-representative body, we have shown the Commission to have been. It is because reasoning, as such, is conspicuous by its absence in the report of the Commission, that the publie has a sore grievance in the fact that the evidence given before the Commission has not been published. That evidence was not given in camera, and the general impression of the public, that followed it keenly enough, is that the majority of the recommendations of the Commission are far from being borne out by the expert advice and suggestions that were placed before it in such abundance. The whole of this evidence is at the disposal of the Government of India. Lord Curzon, would act wisely if he orders a digest thereof to be prepared and compares the preponderating sentiments thereof with the views of the Commission. If the dissening minute of the Honorable Mr. Justice Gooroodas Banerjee is to be discounted, because he is only one against six, with far greater reason must the views of the majority of the Commission be discounted, because they are out of harmony with the weight of evidence placed before them, and placed by men, not a few of whom are as much, if not more, entitled to speak with authority, as any that had seats on the Commission.

It is this inherent defect in the constitution of the Commission which explains several of the unsatisfactory features of its report and recommendations. Their sins are of commission as well as emission. Whilst. some of their proposals seem to be too sweeping and uncalled for by the existing state of things, the Commissioners seem to have failed to realize clearly India's hopes and aspirations, to grasp the most crying grievances of the day and to provide effective means for what appear to educated India the most urgent needs of the day. What past and present students of our Universities have been complaining of, is not so much defects of curriculum or shortcomings in regard, to libraries. and laboratories, as the want of men of first class merit, of model professors of the calibre of Principals Wordsworth, Alexander Grant and Tawney, of ideals that will guide and inspire; and this, as much in our first class State institutions, as in our aided and private Colleges. Secondly, we have begun to feel more and more, as true scholarship and learning is advancing amongst us. the want of both the opportunity and the means for advances literary pursuit after the highest degrees granted by the University are won. The subject is discussed by the Commission under the heading "Teaching Universities." They devote only one page to is and content themselves with suggesting a "Central School of Science or Philosophy or Literature," attached to each University, the studenta to come from the several affiliatad Colleges, without ceasing to be connected with them, and the University to escape the financial difficulty by utilizing, "as far as possible, the services of the best teachers in its own College es." It is difficult to see how students of mofusail Colleges are at one and the same time to attend this Central School and "retain their connection with their

original Colleges," nor are the advantages clear of a University College, teaching the same subjects, and by means of the same professors, as those of its affiliated colleges. If a failure, the University College would be useless, and if a success, the other colleges would become depopulated. The scheme does not in fact seem serious and can hardly claim to be practical and that seems to be the reason why it is so hazy, and its details so imperfeetly worked out. Lost in the anxiety to reconcile the conflicting claims of State and aided institutions and overeborne by the desire of preventing the former to rise to a level which may lie. beyond the reach of the latter, the Commission cannot rise high enough to digest the idea that a University may become a Teaching University by taking up students after they have finished their ordinary College course. and that, just as in the fifties the obligation lay on Government to establish ordinary colleges, so also in the era of advance, we have happily attained to at the beginning of the twentieth century, they can best promote the advancement of learning by establishing Post Graduate institutions of the kind. contemplated by Mr. Tata, and the host of sympathizing experts, whose willing cooperation he has so easily secured. One would have expected that a Commission, which sets up high ideals of attainments and efficiency in external management as well as internal discipline, would insist upon some definite steps of marked advance and progress by the State in this direction. Look, however, at the halting, doubting and half-hearted manner in which they shrink from doing more than touch a question, that may involve a departure from the policy of reform by legislation and "resolu

tion" and not by expenditure, which seem to be the watchwords of the Iudian Government, as much in times of financial crises as of large savings and recurring surpluses. "Judged by the standard of Universities," says the Report, " in other countries, the achievements of the Indian Universities have always seemed poor; but, when, we consider that, in countries in which the Universities depend on direct subventions from the State, the larger proportion of the cost has to be supplied by the funds of the State, we feel constrained to say that unless by Government aid or otherwise the financial position of the Universities can be materially strengthened, the prospect of any change for the better must be indefinitely postponed." The italics are ours. They tell their tale too eloquently for further comment.

. It is these omissions which justify the cry heard from many directions that the Universities Commission's Report is very disappointing. We trust the action of Government thereon will be more generous and cheering, and that Lord Curzon will not fail signalize his vicerovalty by the inauguration in regard to education of that policy of greater liberality, of that noble frame of mind which rises above " the lore of picely calculated less and more", which he has the high renown and undisputed credit of having introduced in regard to famine relief. To turn to the other unsatisfatory features of the Commissions' recommendations, we may point out the want of appreciation and sympathy shown towards private indigenous educational effort and the deadly anxiety evinced to tie down every thing by the stringent bonds of minute rules and regulations, in regard to matters of even such tri-

vial importance as the lodgings of students whose home is far away and for whom there is no provision in hostels attached to the Colleges they attend. It is the spirit of the executive officer, impatient of opposition and delay and anxious to secure unquestioning obedience to his wishes! which is in the predominance in redtape proposals of this nature. pervades in entirety the Commission's recommandations in regard to the constitution of the Senate and the Syndicate, and is thus in glaring contrast with that wide popular basis, which has been the main strength of our. Universities, and in no small degree, the principal cause of their continuous growth and success. One highly satisfactory feature of our Universities is the perennial spring of charity. so particularly copious in Bombay. which they have succeeded in drawing towards them, and on the continuance and rise of which, the Universities Commission itself principally: relies for the advancement of its several projects, Will Lord Carzon enquire why it" is that this flow of charity has run much more copiously towards our Universities than the Schools and Colleges maintained by the State? There can be no other explanation of this undoubted phenomenon than the representative character of our Universities, and the confidence which it in spires in the public mind, Destroy this representative character of our Senates and Syndicates, make them predominantly official and sectional, and we run very serious risk of wantonly checking towards their funds the much needed and ever-welcome flow of private benevolence and charity.

The proposal of the Commission is that Government should by law about

ish the present Senates and appointnew ones, consisting of 100 members each for the older, and 60 for the younger, a tenth of them being elected either by graduates or by the Senates themselves, and all of them holding the appointment for five years, but being re-eligible for nomination. In the first place, the abolition of the old Senates savours too much of a wanton confiscation. No doubt, the existing Fellows are to be permitted to retain "Honorary Fellowships," with power to vote at elections for Legislative Councils and Municipal Corporations. In this class are also to come gentlemen on whom Fellowships are conferred in recognition of benefactions or other services to the Universities. This "Honorary Fellowship will be an empty distinction, shorn of grace and value, specially so account of the contrast, and we are not sure that donors and benefactors will take 'it for anything like a compliment. The existing Fellows have got something like a vested right. They were specifically appointed for life and appointed primarily for the purpose of taking responsible part in the management of University affairs. and certainly not, for the incidental privileges of electing Corporators or Members of Councils. Why is it that these vested rights are to be confiscated, and why is it that the Government is to be asked to take the unenviable odium of unceremoniously taking back that which was unconditionally given by them. years ago, and allowed to be freely enjoyed for ever? Confiscation of existing rights has, no doubt, to be resorted to in extreme cases of urgent public necessity, but even when such a course is peremptorily necessary, the recognised principle of modern jurisprudence, as well as politics, is to give adequate

compensation to those who thus suffer for the sake of the good of the community. But the only justification of all such confiscation must always be not mere sentiment, nor a mere desire for fancied improvement, but a peremptory necessity, universally acknowledged. Does such justification the revolutionary proposal of the Commission? It is said that the Senstes are too large, and that if there is to be any improvement, steps must be taken to reduce the number so as to secure a body of experts, "protected against the incursion of voters brought together in large numbers only by the prospect of an election or by a debate On some question which has been agitated out of doors." Largeness of number is, after all, a question to be judged by a relative and not an absolute standard. The affairs of England are managed by a Parliament consisting of over hundred members, and so also of other democratically governed nations. What is two hundred or three hundred as compared with this enormously larger number of popular bodies elsewhere? . Nor do we know that it has ever been found that any difficulty of debate, any kind of wanton obstructiveness, any reckless waste of public time, any standing impediment to necessary advance and progress, have been developed to a remarkable degree even in the largest of our Senates. As for canvassing and large incursions of usually absent voters on special occasions, these are evila which will increase and not desmaller the field crease. the for manipulation is. Moreover, amongst the existing two hundred to three hundred Fellows of the various Universities, there are many who have left India for good, or at least gone so

ar away us to be practically incapable of attending. If the names of these gentlemen be removed and regular attendance insisted upon, as a necessary condition of the continuance of the Fellowship conferred, and if Government are careful in future not to make nominations "merely by way of compliment," Senates will certainour ly become all that a true friend of progress and reform could desire them to be The Heavens are surely not going to fall down, if, instead of a wholesale confication and arbitrary re-nomination of a select few, the more graceful procedure of gradual amelioration be resorted to. Opposition and parties, no doubt, unfortunately exist in our Senates, but they will exist even it the number is reduced to a hundred, or for the matter of that, to fifty or even twenty, unless, of course, a care ful manipulation weeds out all those who are likely to dare to have views of their own. It is the possibility of a manipulation of this kind during future regimes, if not in this-for, we have faith in Lord Curzon's good sense and spirit of toleration, -which is at the root of the strong opposition which this particular proposal has evoked in almost all sections of public opinion in India. The very policy of placing the Universities on a basis, different from that of the Educational department, was to make them independent representative bodies, commanding confidence of the public and attracting thereby the flow of charity towards them. A departure from this timehonoured policy will be a far more retrograde step than even the Calcutta Municipal Bill. The proposal to make Fellowships durable only for five years is open to still more serious objections. In the

case of the ten elected Fellows, it will mainly be a quesion of repeated trouble and worry. We are not sure that the best men will be ready to undertake it every five years. The effect would very likely be to promote the growth of demagogism and set a bar against the incoming of men of real merit and attainments. As regards the nominated ninety Fellows, what independence shall we expect of them, if their continuance after five years is to depend entirely upon the good graces of the executive? The conversion of our Universities into State departments will surely be a lesser evil than this round about method of ensuring a packed majority. acting by mandate, under the penalty of unceremonious dismissal. An open and avowed autocratism is much preferable to the mere semblance of representation.

As if not satisfied with ensuring a particular majority in the Senate, the Commission proposes to enlarge the powers of the Syndicate and insist upon a majority of the members being either heads of colleges or professors. Director of Public Instruction is to be the ex-officio Chairman of the body. We can understand the justice of an arrangement of this kind at Universities which are merely associations of institutions, concentrated in one place and closely bound up with each other by undying ties of common interests and of common parentage, income and management. We have, however, to take the facts as they are in India. Our Universities have to control and guide, no less than to give unity to our various colleges of varied and conflicting interests, to our aided and un-aided, our purely Indian and foreign, our secular and missionary, our State-supported and Private in-

sobjects to attain, and different "ideals Ho achieve. The "supervising" body ought not to 'consist of a majority of those very persons over whom the supervision is to be exercised. Met that Principals and "Professors should be excluded from the Symboute, but if they are sto come in let them come by the open door of sunfettered islection of A: close body rof a esrefully melected comports as the mey Senate is the becausely could be one Principale and Professors as he worthy of cou-Adence will be us they now are, thosen for the Syndicate. A mechanical and an enforced "preponderance of them; to the exclusion of worthy men outside the fold, who would otherwise come in, would prove a serious deterrent to improvement and advince. Family arrangements have rarely led to progress and a packed up Syndicate, with enlarged powers, would therefore be a greater evil than a packed 'np jo-liukum 'Senite.' Instend of advancement we may thereby have a fegine of self-sat shetrou, mutual adulation and unmitigated stagnation. It was the superior will Next comes the question of the nature and extent of the control of the Universities over colleges affiliated to them, and the main objects to be aimed at in regard to the character of the education to be imparted and the classes of the community amongst whom it should be the primary end to spread the benefits thereof. The Commission proposes that the Syndicate should have exclusive jurisdiction in regard to the affiliation and disaffiliation of colleges, that affiliation should be granted only on "a report by the Director of Public Instruction, or

some other competent authority (?)

stitutions all more of dess with all of

some another, and each having different

showing why the new institution is required," that affiliation should be granted only on proof of adequate pro-"Vision" as regards teachers, libraries, and hiboratories, and further that, in order to check unfair competition, a minimum of fees should be fixed and -limitations put apon the number of freestudentships allowed. We, for one, welcome with all heart every effort to promote efficiency and discipline and would rather have no colleges, than have institutions which are imperfectly equipped and indifferently manned. So far as the proposals of the Commission aim at securing this efficiency before affiliation, and at guaranteeing its unimpaired continuance efter affiliation, they have our full approval, provided that the suggested inspections are carried on by disinterested persons and do not assume too inquisitorial a character. There are, however, reasons why the proposal to vest the entire jurisdiction in this matter in the Syndicate is to be seriously objected to; specially so, if these bodies are to have, by law a decided majority of the Professors of existing Colleges. We would not place in their hands the power to prevent a possible rival from coming "into | existence." "Nor should the suggested report of the Director of Public Instruction on such intricute question as the why a'm d wherefore of an institution be at all needed. "The only pertinent question of importance is that of efficiency and permadency in The Syndicate may enquire into it, but the final decision should rest with the Senate. Then only would it always be inst and Impartial; and what is more, above make Fillowed gedarabloique "It is impossible to agree with the Commission in the proposals to Tetter

growth of ne₩ Colleges among us, as they ipropose to do, by fixing a minimum rate of fees and by insisting that Second grade Colleges shall either grow up into full-course Colleges or revert to the position of High Schools, A minimum rate of fees is proposed on the ground that without it "the standard of education and discipline is lowered." We fail to see how the two can be connected together. We know even of Government institutions levying high fees and yet having a poor professorial staff. On the other hand, private charity or a self-abnegating spirit might secure, as in the case of the Fergusson College at Poona, full equipment and efficiency of instruction without the need of a large income by means of high fees. The Commission itself has seen the difficulty of arriving at the precise minimum suited to "local circumstances, the demand for higher education and the ability of the class of students" likely to attend, and they have to recommend that exemption from the minimum rate should be allowed to institutions "which are maintained by rich benefactors or the promoters of which are induced by religious, patriotic or philanthropic motives to give their services free or for very small remuneration." exceptions are numerous enough to make the rule itself an exception; and the difficulty of deciding the minimum even for a whole Presidency is so very great, that whatever its theoretical justification, the proposal of a minimum rate stands condemned as wholly impracticable. If the minimum is low it would be useless; if it be high it will inflict great injury upon our poor studente. The Commission indeed aims at excluding from the benefits of

University education "poor students of but ordinary ability." One wonders, why !!! The mediocre rich do come in, all the same; and we do not see why special attempt should be made to shut the portals of the Temple of Learning against the mediocre The Commission seems to be labouring under the delusion that it is only by restricting the number of students in our Colleges that the highest educational attainments can be secured in the best of them! That is a clear fallacy. In order to gain in depth it is certainly not necessary to sacrifice breadth. Nay, in order to secure great height it is necessary to make the base as wide and broad as possible. Moreover, no Universities can justify their existence if they aim at taking care only of the gifted few. Their aim ought to be as much to spread far and wide ordinary learning, as to give special opportunities for the gifted few to reach the highest attainments their intellects are capable of. To have a few towering intellectual giants standing at heights beyond reach, with the bulk of the population grovelling at a low level of knowledge, can scarcely be the ideal, a country should aim at. We should, rather, have a landscape in which heights rise over heights by an even gradation, and every patch of ground bears the verdure, it is capable of, by gift of nature or the accident of situation. If it had been otherwise, the University Extension movement of England, nay the very ideal of instructing the masses in the three "R"s would have no meaning. The Commission makes much of what it calls efficiency and calmly contemplates "the withdrawal of some of the opportunities now offered to students in India." So

far as enforced efficiency may by itself tend to reduce, whether for want of talent or money, the number of our college students, we too will certainly face the result with courage and equanimity. But efficiency is, after all, a relative term, and the only intelligent meaning that can be attached to it in this connection is a necessary minimum of proficiency in a necessary minimum of learning. Let this double minimum be raised or lowered, as you will, but why, indeed, should a further impediment be provided by insisting upon a minimum rate of fees? A mere reduction of the number of students, or of the Colleges they can attend, would certainly never directly or indirectly promote efficiency. If it is difficult to understand the adtantages of raising fees, it is still more difficult to justify the abolition of all Second grade colleges. So far as they go, they may be very efficient indeed; and if they are so, why should they be abolished, merely because at the place they exist, there is not sufficient demand to maintain higher classes? If the argument is carried to its logical conclusion, we shall have to abolish all High Schools that cannot develop into Colleges and all Prinary Schools that caunot develop into High Schools. We, for one, are no advocates of "an inadequate course of instruction leading to a depreciated degree," but we shudder to think of the consequences of a policy, which tends to drive away from college life those who may not have the means to go to a place where a first grade Arts College exists, but who would gladly study up to the highest classes of a second grade institution nearer home-We shudder at the attempt to reduce the number of those who may like to receive higher education, whether they

are able to finish the whole University course or not. We know that the spirit of criticism which University education engenders is unpalatable to some, but it is a safety valve of great value and the best antidote against that ram pant secret sedition which so often breeds in countries steeped in ignorance. Those who check the spread of this education, would, we hambly believe, prove in the long run the worst enemies of British rule.

The Commission is on much stronger ground in the reforms it suggests in regard to the system of teaching and in regard to the curriculum of studies it proposes for uniform adoption by all Indian Universities. Their condemnation of "Keys" of all kinds, their proposal for training teachers for High Schools, their setting a higher ideal for teaching Arabic, their defence of the introduction of the Vernaculars as an optional subject for the M. A., their insisting upon a practical course in laboratories in the study of Natural Science, their condemnation of appointing as Professors of Medical. Colleges, gentlemen who have no special qualifications:-these and proposals and suggestions of this kind are, we gladly allow, very well thought out and likely to command the respectful attention of all genuine friends of true learning, as such. Nor is the standard course they lay down for our Intermediate and B. A. examinations open to criticism, except that they have underrated the importanes of History and Political Economy and overrated that of Philosophy. The former gives information and wisdom of practical value, whilst the best claim of the latter is that it has " a high disciplinary value in the training of the mind." One would think that Mathematics are

enough to give this necessary mental discipline. To have the two as compulsory subjects, to the exclusion of History and Political Economy, is to set too high a premium upon abstruse subjects and forget that one great object of "Liberal Education" has always been, and should always be, to equip the recipient thereof to discharge properly the duties of enlightened citizen-What we, however, more eliio. seriously object to, is the programme to stereotype all Indian University culture and produce a dead uniformity, which will leave no room for a wholesome diversity of educational ideals. We are often told that India is a land of many communities of radically different propensities and characters. If so, there should be different educational ideals suited to the peculiar aptitudes of the various Indian populations. Oxford, London and Cambridge have all difforent ideals, and no one dreams of giving up the interesting diversity of intellectual development produced thereby. We, therefore, think that it would be enough to place the ideal carriculum of the Commission before our several Universities. They should be left free to make their own modifications and put their own stamp

We have so far discussed the more important recommendations of the Commission, and specially such of them is are likely to be provided for by a new enactment of the legislature. They are questions of vital interest and principle, a dour main contention in regard to them has been that it would be fatal to destroy the representative character and the popular basis of our Universities in to seriously curtail their interendence and infringe their interedence, merely for the sake of

producing a dead level of a minutely worked out ideal of aim, object and method, which is far from being unassailable. If our demand for autonomy and independence is conceded, there will be small reason to go at length into the numberless minor proposals. mainly of of which the Commission's report is so The Commission, indeed, would have the Governor-General in Council " empowered to frame new regulations for each University." We believe that even the indefatigable Lord Curzon's Government will have too many more important matters to attend to, than to undertake the laborious task of seeing that all the Universities have strictly, and to the letter, conformed to the main doctrine, as well as the rites and rituals, prescribed by the elaborate Gospel of the Universities Commission Whilst some of these minor proposals and suggestions are commendable, such for instance, as those recommending the establishment of Boards of studies, Tutorial classes, College common rooms, and societies and pursuits tending to promote corporal University life,-there are others, which are extremely debat able. We shall refer only to a few by way of example. The Commission proposes that Central Schools of Law should be established in the Presidency towns, and that all other local Law classes should be abolished. Apart from the fact that this will be a financial blow to many deserving private institutions, it will also mean an arbitrary suppression of all competition and a direct reversal of that policy of special encouragement to private effor, which was so strongly recommended by the Education Commission of 1882. No wonder that the Commission discountenances the very idea of letting private Medical Colleges spring up, although they have

to admit that in some of the single State institutions, notably the Grant Medical College at Bombay," there is overcrowding in the class rooms and the arrangements for practical work are generally inadequate." They propose that the Intermediate examination should be made the preliminary test for entrance in Medical Colleges, and that out of those who pass the final examination, the degree of M. B. should be conferred on some only, a mere license being given to those "who attain a somewhat lower standard in both extent and depth of knowledge." That, we suppose, would be a difference without a distinction. What would be a mere difference of class in other faculties would be in Medicine a marked difference in status!! The better course would be, we think, to make the Matriculation the entrance test, with a four years' course for the license, as against the Intermidiate, with a five years' course for the M. B. degree. The Commission proposes that the Registrar should be a full time officer. liable to dismissal by the Syndicate but appointed by the Senate. The present arrange ment of periodical elections of the Registrar would seem to be: far better, for it leaves room for locus penitentiss and we can easily get rid of a Registrar who proves a failure. Nor can we digest the idea of the 'Syndicate's being empowered to dismiss the Registrar. It would so degrade him in his own eyes. We appreciate the proposal to fix an age limit for the Matriculation and the provision of some wholesome check on the submitting to examination by private students who come only to fail, and often come after violating discipline. We can not, however, approve of the proposal that the University should recognise only such

schools as are recognised by the local Educational department. We do not see why purely unaided private institutions should be compelled to secure recognition by the Edu. department as a condition cational precedent for recognition by the Uni-The Educational Deversily. partment may mean in some cases, a Deputy Educational Inspector, perhaps a Collector or a Police Superintendent. Teachers of private schools bave sometimes come in conflict with local authorities in regard to Municipal or other local questions, and thus incurred the misfortune of official disfavour. Schools manned by such teachers may unjustly be refused recognition by the University under the proposal made. Another objectionable proposal is to disallow candidates to appear at the Matriculation more than three times "whether at one or at several Universities." With the tens of thousands that appear at the Matriculation, the difficulty of identification would be so great that the rule will practically remain a dead letter in the. case of all save the exceptionally honest. There may be some justification in theory for the Commission's proposal that the Matriculation should not beaccepted as any test of fitness for Goverrament service, but we fail to see the justification of their proposal that there should "be one public examination instead of two" if there is to be a radical distinction between the attainments required and the status given. "A system under which a candidate for Matriculation would have to pass in certain subjects and to satisfy any additional requirements of the University at a separate examination," would, in reality, mean two different examinations. The jumbling up of the two together would only lead to confusion,

In this, as in regard to some other proposals, the Commission does not seem to have worked them out in full detail, notably so in regard to Commercial education. They do not condemn the idea of a separate faculty in commerce, and admit "that a demand for instruction in commercial subjects exists" but they leave the matter to be finally decided "when occasion arises;"—two very contradictory propositions, certainly.

We suppose, we have said enough to show that if the proposals of the Commission, as regards a new constitution and a new ideal of aims and objects, are positively detrimental to the best interests of the country, several of their minor recommendations stand badly in need of further consideration and material modification. We fervently hope that Lord Curzon's Government will bring to bear on them the strong personality and original thought for which his Lordship is so conspicuously

distinguished. We trust he will take no leap in the dark nor radely disturb a system for the empty satisfaction of a radical innovation. On the hand, his Lordship can add fresh laurels and win eternal gratitude of educated India, if he pursues in regard to higher education a policy of greater liberality than Government seem to have been inclined to pursue for some time past. The best rulers of India have always distinguished themselves as great patrons of Learning. The traditions of Raja Bhoja and Akbar, of Macaulay and Ripon, are still green, still deeply revered in India. How happy would it be, if at the time of the forthcoming grand Coronation Ceremony at Delhi, the august representative of our new King-Emperor gives us a new charter of genuine University advancement in the form of greater opportunities and facilities for higher learning, higher than that for which the State has hitherto made provision.?



A Scheme of Compulsory Education

FOR

Bombay.

In this article an attempt is made to sketch roughly a scheme for making primary education universal in the city of Bombay by adopting compulsory attendance first for boys and then for girls. The method of enforcing compulsion is indicated and the machinery needed for the purpose detailed at some length. The cost of making education universal is also calculated, the programme being distributed over a period of fourteen years ending with the year 1930-31.

CENSUS OF SCHOOL-AGE CHILDREN

The first practical step that the Schools Committee of the Corporation may direct its attention to, is that of taking a regular census of school-age children, boys and girls, in the city, ascertaining at the same time the mother-tongue of the child and the language the parents would like him or her to be instructed in. The question will naturally arise what age should be taken as the primary school-age. The age between 6 and 12 would seem to be the proper one. The primary course in this city is usually of 5 years' duration for the majority of Indian children. A number of Parsis, and all Eurasians, Anglo-Indians, and Indo-Portugese do not educate their children in any of the Indian vernaculars and send them to English, instead of to vernacular schools, to start with. Such children may obviously be excluded, for the sole function of the Schools Committee is to provide and maintain schools for primary education, which is understood to. mean primary vernacular education. Such a census was taken by the Schools Committee as early as about the year 1896 and served a very useful purpose in showing which portion of the population secured the benefit of primary education for its children and which portion allowed children to grow up illiterate. A column in the census statement may be provided for ascertaining from parents, whose children are not at school, the reason why they do not educate their children. The parts of the city where school accommodation is most

deficient may also be ascertained from this census, so that the defects thus bought to light may be rectified when the annual allocation of new schools takes place. Various figures are quoted as the school-age population in the city according to the last census of 1911. Some say that the figure does not exceed 83,000, while, others say it is 1,12,000. The proposed census will give a definite and correct figure.

TEACHERS' TRAINING COLLEGE

Another important question is the necessity of equipping and maintaining a college in Bombay for the training of primary school masters and mistresses. Any serious student of this question will realize that if primary education is to be made universal, or, even extended very widely, a large number of efficient teachers is needed and that the Government may before long discontinue the facility given to the Municipal Corporation of having its teachers trained in the Government colleges at Poons and Ahmedabad. Soon after the present war ceases, the Government themselves will have to prepare for a large expansion of primary education in the rural areas of the Presidency, and, as a result, all the accommodation in their colleges, the number of which is very small, will have to be reserved for this purpose. Even at the present moment the Corporation has seen the necessity of opening its own training classes for Gujarati and Urdu teachers, and the development of these classes into a training college with a two years' course is but an easy and not a very expensive step. With the progress of primary education at the present rate, the number of new trained teachers required is not a very large one, the number of schools annually added being never more than 15. But when it is decided to enforce compulsion or even to adopt a policy of wide extension on' a voluntary basis, Government assistance in the matter of training teachers cannot be much relied upon.

AID TO PRIVATE SCHOOLS

Another fact to which pointed attention should be drawn is the encouragement to those private schools which have accepted the curriculum adopted for municipal schools. At the present day in Bombay there exist 132 such schools attended by about 15,000 children. Though the number of children taking advantage of such schools is annually increasing, it does not increase as fast as that of children attending Municipal schools. In a place like Bombay, where many parents are not unwilling to pay fees varying from As. 8 to Rs. 2 per month, if

the children receive greater individual attention than in municipal schools, a number of new private schools will spring up as they are sure to be remunerative to managers and proprietors, provided the Schools Committee arranges to give them fairly decent grants. the mofussil such primary schools very rarely pay their managers, unless the schools are fed from the interest of large charitable funds set apart for the purpose. The scale of grants paid at present to the managers of such schools by the Corporation, however, has been fixed very low and works out to about Rs. 4 per pupil per annum. Assuming that a large number of children at present going without any education can be persuaded or compelled to attend schools, and that new schools have to be provided to accommodate them, the cheaper and easier method will be to support liberally the private aided schools in existence, and to encourage, by a more generous scale of grants, the starting of new private schools. The expenditure which the Corporation incurs for educating a child in its own schools never comes to less than Rs. 20 per annumon an average. It will thus be economical for the Corporation even to double the rate of grant now paid to the managers of private schools, if thereby a large number of would-be students can be diverted to such schools.

COMPULSORY ATTENDANCE TO BE LEGALIZED

It may be assumed that towns, especially large cities like Bombay, Ahmedabad, and Poona, will, in the near future, say within the next five years, be empowered by law to compel parents to send their boys, if not girls also, to primary schools. This question has constantly been brought up before the Imperial and Provincial Legislative Councils in the form of resolutions and private bills and public opinion is gathering strength. It will not, therefore, be long before Government will yield to the concentrated force of public opinion on this subject. The power of enforcing compulsory attendance may be given to Municipal bodies either by necessary amendments in the Local Municipal Acts which are proposed by the Hon. Mr. V. J. Patel for the Bombay Presidency, or by an All-India Act as was proposed by the late Mr. Gokhale in 1911. At any rate it can reasonably be expected that cities like Bombay, Calcutta and Madras will take the lead in the matter and set an example to Municipal Boards of other towns.

SCHOOL ATTENDANCE COMMITTEES

The next question to be considered is the method of enforcing this compulsion. The best method would be to establish for each

ward of the city a School Attendance Committee consisting of prominent and influential men from different communities residing in that particular ward. If necessary, each Attendance Committee may be subdivided into several sub-committees dealing with different communities. Though these committees may be armed with the power of prosecuting recalcitrant parents, it should be seen that this power is resorted to as rarely as possible. Every thing would depend upon the persuasive method to be adopted by these committees, and, as in Japan, persuasion by the committees and their staff can be entirely depended upon for making education universal. Once the people come to realize that the persuasion used is in the interests of their own children and that it is within the power of the committees to prosecute them, if repeated requests be not complied with, people will not be unwilling to assist the committee by not compelling them to enforce the law. Assuming that there are 1,00,000 of children of school age in Bombay of whom 50,000 are boys, and deducting from this number the 25,000 boys that are already at school in recognised institutions, there remain 25,000 boys to be dealt with by these committees. The existing wards of the city should be so divided into twenty-five sub-wards as to contain approximately 2,000 boys (equivalent to a population of about 40,000). The committees appointed in charge of each of these sub-wards will have to deal with those 1000 boys only that do not at present attend school. A sympathetic committee, consisting mostly of elderly and influential citizens, going round every morning for a couple of hours, accompanied by school masters, will not find much difficulty in inducing parents to send their children to school. To obstinate persons, if two or three oral requests be not complied with written notices may be served drawing their attention to the law of compulsory attendance and the penalty to which they make themselves liable if prosecuted and convicted. If, even after the issue of the notice, a parent denies to the child the benefit of education, prosecution may be undertaken before a bench of Honorary Magistrates, and light fines of, say, Rs. 2 to Rs. 5, in the first instance, may be inflicted. But is it too much to hope that two or three persuasive talks on the benefit of literacy for his children, followed, where necessary, by a written request or a notice to the same effect, will not go unheeded by any rational being who has the interest of his children at heart?

REGISTER OF SCHOOL-AGE CHILDREN

Coming to further details of the method and machinery for the enforcement of compulsion, it will be necessary first to prepare lists

of householders residing in different houses, such lists to be more or less of a permanent nature, the change of tenancy being noted therein from time to time. Against each householder's name, the names of all children both boys and girls, between four and twelve years of age, should be noted. It is not proposed that boys of age 4 to 6 should come under compulsion, but they should be kept under observation. The existing departmental rules permit of children who have completed their fourth year being admitted to school, and they may voluntarily attend it, unless the minimum age is raised to 6. These registers will vary from time to time, even if the householder does not change his habitation, by the children of the family going out of Bombay or by the younger children entering their fifth year of life. Under the by-laws that the Schools Committee will have to frame, the owner of a house or his agent should be compelled to notify in writing, on prescribed forms, changes of tenants, or, at least, the fact of tenants' vacating the premises. The clerks of the sub-ward committee should go round to new tenants and inquire if there are any children of ages four to twelve in the families of the new tenants. The lists thus prepared should be sent to the Head Masters of schools likely to be resorted to by such boys among these as are of age 6 to 10 or 12. The Head Masters, in turn, should notify the names of the boys who ought to attend but have not attended, and the committees should take steps to act on information thus obtained, during their morning rounds, the parents being advised of the location of schools in their locality. The arrival of new children from outside the city should be notified by house-owners or other agents. Under the by-laws of the Health Department all births are reported, under a penalty of a sum not exceeding Rs. 100/-. Lists of such births should be obtained by the Ward Committees from the Health Department so as to facilitate their work of registering the names of four years old children later on. All deaths of children above one year should be noted and the names scored off the lists. A paid staff working under the orders of the Chairman of the Ward Committee will be necessary to carry out these duties from day to day. The executive officer in charge of this work, to be called the "Schools Committees' Ward Superintendent," may be employed for Re. 100/- to Rs. 150/- per month. This officer will supervise the preparation and revision of lists of children in his ward, issue notices to parents and be responsible for all prosecutions against obstinate parents. He may be assisted by about 5 Inspectors, each with a salary of Rs. 50 to Rs. 60, office clerks and outdoor clerks. For about 5 years after the introduction of compulsion, members of the Attendance Committees or sub-committees should go round in person, leaving thereafter the work of persuasion and warning to be done by the Ward Superintendent and his Inspectors.

The total annual expenditure to be incurred on the staff of Attendance Committees, if compulsion be enforced for all school-age boys and girls in the city, will be as follows:—

7 Ward Superintendents @ Rs. 150/- p.m. Rs. 1050.
35 ,, Inspectors @ ,, 60/- ,, ,, 2100.
105 Clerks for Inspectors ,, 40/- ,, ,, 4200.
35 Office clerks ,, 50/- ,, ,, 1750.

Rs. 9100

Or for 12 months Rs...1,09,200,

or say Rs. 1,10,000/-.

COST OF THE SCHEME

A rough estimate of the increase in annual expenditure for the education of all boys and girls of school-age together with the expenditure required for other improvements that may be found necessary, may now be indicated. The present expenditure incurred per pupil in Municipal schools is about Rs. 20/- per annum. To be on the safe side, this may be taken at Rs. 22/-- so as to provide for a rise in teachers' salaries and other increased expenditure. The cost to the Municipal funds of educating a boy in an aided (private) school is at present Rs. 4/-per annum. To afford greater encouragement to private aided schools and thereby to lighten the responsibility of the Municipal Corporation, it may be assumed that in furure a grant at the rate of Rs. 8/- per pupil per annum instead of Rs. 4/- will be paid to managers of private schools. It may further be assumed that half the number of fresh boys that will be brought to school under the law of compulsion will attend Municipal schools to be newly-started and the other half will attend private schools that will be encouraged with the assistance of increased grants from the Municipality. The average cost, therefore, of educating a boy will be Rs. $\frac{22+8}{2} = 15$ Rs. per annum. Deducting from 50,000—the total male

school-age population—25,000 boys who are now at school, we have 25,000 boys for whom this additional expenditure at the rate Rs. 15/per annum will have to be incurred, which means that Rs. 3½ lakhs will have to be provided annually for that purpose. A further sum of one lakh of rupees should be available for additional girls' schools that will be required during the period of about 5 years until compulsory attendance is introduced for girls. An additional lakh will also be necessary for a teachers' training college, school equipment and for improvements.

Thus the total new annual expenditure that will have to be incurred when compulsion is brought fully into force for boys will be as follows:—

		Rs.
Staff for School Attendance Committees	***	1,10,000.
Educating 25,000 new additional boys	***	3,75,000.
Additional Girls' Schools	***	1,00,000.
Improvement in education and teachers' training	658	1,00,000.
•	Rs	. 6,85,000,

or about 7 lakhs of rupees.

Out of about 50,000 girls of school-age in the city not more than 12,000 at present take advantage of schools. The enforcement of compulsory attendance of girls of age 6 to 10 or 6 to 12 will follow four or five years after the introduction of compulsion for boys of similar ages. So the expenditure for educating the additional 38,000 girls will have to be made when the full scheme of compulsion for boys has been worked out. Taking Rs. 15/- as the average expenditure for educating a girl, the total expenditure on that account will be not less than Rs. 5,70,000/- or say 6 lakhs. Thus the total additional expenditure when compulsion has been fully introduced for both boys and girls will be, approximately, Rs. 6 lakhs, which is the present expenditure, plus Rs. 7 lakhs for boys, plus Rs. 6 lakhs for girls, aggregating Rs. 19 lakhs or, to provide for the increase in population, say, Rs. 20 lakhs. The present revenue of the Corporation is Rs. 138 lakhs and about the year 1930, by which time it is estimated the scheme will come into full fruition, the revenue must have expanded to not less than Rs. 175 lakhs. This estimate of revenue cannot be said to err on the side of exaggeration; if at all, it errs on the side of caution. The proposed expenditure of Rs. 20 lakhs works to about 11½ per cent. of the total estimated revenue in 1930. No doubt this is more than three times the present rate of expenditure for education, but it is less than what the average moffussil Municipality spends on education even at the present day in proportion to its income. When the average moffussil Municipality spends at present not less than 16 per cent. of its income on primary education, it is not expecting too much of the Corporation of the first city in India to spend on education 11½ per cent. of its income after about a dozen years from now.

PROGRAMME FOR FOURTEEN YEARS

The following may be taken as the chronological order of the different stages leading up to the full introduction of compulsory attendance of boys and girls.

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1917-18 ... Taking census of school-age children.
 1918-19 ... Starting a Training College for Urdu, Gujarati and
                 Marathi teachers, teaching first year course.
           ... Starting second year's course in the Training College.
 1919-20
           t.. Preparing preliminary lists and setting up attend-
                 ance machinery for the introduction of com-
                 pulsion rules.
 1921-22
           " Working the Compulsion Act for boys of age 6 to
 1922-23
                  10 and putting it into full force.
 1923-24
           ... Raising the age limit for boys from 10 to 12.
 1924-25
           ... Obtaining legal sanction for compulsory attendance ·
 1925-26
                 of girls.
 1926-27
 1927-28
                Working the Compulsion Act for girls of age 6 to 10.
1928-29
 1929-30
               Raising the age for girls from 10 to 12.
 1930-31
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The total Municipal expenditure of Rs. 20 lakhs as mentioned above may be distributed over the period from now to 1930-31 as follows:—

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1917-18 ... ... Rs. 6½ lakhs.
1918-19 ... ... , 7½ ,,
1919-20 ... ... ,, 8½ ,,
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1920-21 ...
1921-22 ...
                   ,, 10\f
1922-23 ...
                   ,, II ½
1923-24 ...
                      121
1924-25 ...
1925-26 ...
                  ., 15
1926-27 ...
                      16
1927-28 ...
                   ,, 17
1928-29 ...
                   ,, 18
1929-30 ...
                      19
1930-31 ...
                      20
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It is thus proposed that the expenditure should be increased annually by a recurring sum of rupees one lakh as has been done in the current year.

Here it may be emphasised that all the calculations made above are approximate only and liable to variation when the scheme comes to be worked out in detail. The scheme too is merely tentative and admits of being improved upon or altered to suit the finances of the Corporation and the needs of the people. All leaders of public opinion in the country are almost unanimous in thinking that the three presidency towns of Bombay, Calcutta, and Madras should take the lead in the matter of introducing compulsion. Is it too much to expect the urbs prima in Indis to set an example to other parts of the country? No doubt the city has lagged behind several other cities in this respect so far, but its educational conscience has been recently awakened, and it is a hopeful sign that it has emerged from the stage of indifference.

Servants of India Society.

Bombay, April 1917.

A. V. THAKKAR

A FEW FACTS

ABOUT

Primary Education in Bombay.

- (!) The population of Bombay in 1911 was 9\frac{3}{4} laks. The highest estimate of the number of children of primary-school-age i. e. of age 6\frac{1}{4}0 i\frac{1}{2}, is 1,12,000 and, the lowest, 83,000. The total number of children in Municipal, aided, recognized, indigenous and Koran Schools was at the end of March 1916 only 44,707. Thus there remains not less than 38,300 children at the lowest possible, estimate who are growing up illiterate, and whom we should try to bring to school.
- (2) Since the control of primary education passed from the Joint Schools Committee to the Municipal Schools Committee, i. e. since 1908-09 things have improved, but not sufficiently. Expenditure has increased from 2½ lacs in that year to 5½ lacs in 1916-17, and the number of students in Municipal and aided schools from 21,500 to about 38,000 during the same period. The fact that we have yet to at least double the number of children now at school, should be borne in mind.
- (3) Compulsory Education must be legalized. "The experience of other countries has established beyond doubt the fact that the only effective way to ensure a wide diffusion of elementary education among the masses of the people is by a resort to compulsion in some form or other". (The late Mr. G. K. Gokhale),
- (4) Incidence of Municipal revenue per head of population is in Bombay three times as much as in an average mofussil town, but our expenditure on primary education to theirs per head is not in the proportion of 3 to 1 but less than 1 to 1. In Bombay we spend 4.2 P. C. only of our revenue, while the mofussilites spend as much as 16 P. C. of their Municipal revenue.

Is this creditable to Bombay?

Scheme of Examinations to be held in 1909, by the National Council of Education, Bengal.

GENERAL RULES.

- I. Two public examinations of the Fifth and the Seventh Standards of the National Council of Education, Bengal, corresponding respectively to the Matriculation and Intermediate in Arts standards of the Indian Universities shall be held in the third week of June, 1909, on the dates and in manner hereinafter stated.
- II. Candidates for the Fifth and Seventh Standard Examinations shall be of two Classes viz. Internal i.e. those who are sent up by institutions affiliated to or recognised by, the National Council of Education, Bengal, and External or private.
- III. External candidates desirous of presenting themselves at these examinations shall apply with certificates hereinafter mentioned for permission to present themselves at these examinations. Every such application shall be signed by the applicant in the presence of a Head master of a High School or a Principal or Professor of a College, or a member of the National Council of Education, Bengal, or a legal practitioner of rank not lower than that of a District Court pleader who should certify on the application in the following manner:—

- V. All applications in the prescribed printed forms should reach the Secretaries of the National Council of Education, Bengal, at No. 166, Bowbazar Street, Calcutta, not later than the 15th May, 1909. Such printed forms may be obtained on application from the Secretaries.
- VI. A fee of Rs. 6 for the Fifth Standard and Rs. 10 for the Seventh Standard Examination payable in cash or by a Post Office order shall accompany the applications.
- VII. Candidates who are refused permission to appear in the examinations shall have their fees refunded to them along with the reply conveying information of such refusal. Candidates are warned that they will be refused permission to appear if their application does not contain in the proper place the applicant's signature and the signature of the person granting the certificate, or if the application does not contain the necessary particulars.
- VIII. Candidates whose applications are accepted will, if unable to appear in the examination for any reasonable cause, be allowed to appear in any subsequent examination on payment of half the prescribed fee.
- IX The centres for holding the Fifth Standard examination are Calcutta, Dacca, Sylhet, Rajshahi, Rangpur, Comilla, Bankipur, Benares, Amraoti, Poona, Agra and Lahore and such other places as may be notified hereafter, and the examinations shall be conducted under the supervision of the members of the Council who represent those districts, or by other persons duly authorised on that behalf. Calcutta shall be the only centre for holding the Seventh Standard examination.

Special Rules for the Fifth Standard Examination, 1909.

(a) For the Fifth Standard test fixed by the National Council of Education, Bengal, there shall be the following subjects, papers, time and marks attached thereto.

	Subjects	No.	of papers.	Time.	Full Marks.
(I)	One of the three class	ical)	• •		•
sian ar	languages – Sanskrit, I nd Arabic – with a V	Per-	2 papers	3 hours each	100
nacular.					
(2)	Second Language (En	glish)	2 papers	, 3 hours each	100
(3)	Mathematics		2 papers	3 hours each	100
(4)	History and Geograph	y	2 papers	3 hours each	100
(5)			ne paper xamination (3 hours	50
		` e	xercises in Done in class		} 50

(b) In subject (1), Bengali, Hindi, Urdu and Marathi shall be the only recognised vernaculars.

- (c) Answers in Sanskrit may be written either in Devanagari or in Bengali character.
- (d) In subjects (3) and (4) there shall be no fixed text-books and answers may be given in the candidate's own vernacular or in English.
- (e) Drawing will be a compulsory subject for the Examination to be held in 1910. There will be an examination in Drawing in 1909, and those who pass in it shall be entitled to a special certificate. The examination shall comprise an examination of the class exercises as also a written examination.
- (f) Candidates not sent up by any institution recognised by the Council are required to produce satisfactory evidence that the exercises in Drawing referred to in subject (5) were actually done by themselves. In the case of candidates sent up by an institution recognised by the Council, the certificate of the head of such institution is obligatory and will be deemed of itself satisfactory evidence. The exercises in Drawing should be forwarded to the Secretaries with the candidate's application.
- (g) The Fifth Standard Examination shall be held on the following dates and in the following order:—

1st Paper-Text and Grammar, 10 A.M. to 1 P. M. Monday (14th June) -and Paper-Vernacular - Text and Translation Oriental Language. and Composition in vernacular, from 2 PM. to 5 P.M. Tuesday (15th June)— 1st Paper—Text and Grammar, from 10A.M. to 1 P M. Second Language and Paper-Unseen Passages, Translation and (English). Composition, from 2 P.M. to 5 P.M. 1st Paper-Arithmetic and Algebra, from 10 A.M. Wednesday (16th June)to I P.M. Methematics 2nd Paper-Arithmetic and Geometry, from 2 P.M. to 5 P.M. 1st Paper - History, from 10 A.M. to 1 P.M. Thursday (17th June) and ! History and Paper-General and Physical Geography, from 2 P.M. to 5 P.M. Geography Friday (18th IO A,M. tO I P.M. Drawing

(f) In order to pass the examination a candidate must obtain at least 30 per cent. of the total marks in each subject; but in the subject of an oriental language with a vernacular at least 30 per cent. of the marks in each paper must be secured for a pass. If, however, a candidate obtains more than 50 per cent. of the full marks in any subject other than oriental language, or in the first paper as well as in the aggregate in oriental language, 25 per cent. in place of 30 per cent. in the other subjects or papers required by the foregoing rule, shall be deemed sufficient in his case. In Drawing 25 per cent, shall be the minimum pass marks. Candidates obtaining 50 per cent of the marks in the aggregate and upwards shall be placed in the First Division, those obtaining 40 per cent, and upwards in the Second Division and the remaining successful candidates in the Third Division.

DETAILS OF SUBJECTS FOR THE FIFTH STANDARD EXAMINATION, 1909.

ORIENTAL LANGUAGES.

PAPER I .- Full Marks 50.

TEXT AND GRAMMAR.

Sanskrit.

- r. Portions as specified below of হলুবার, Part III. by Pandit Iswar Chandra Vidyasagara.
 - (A) Prose—दितेष मः।
 - (B) POETRY-
 - (a) विश्वप्रराषम्—भूवापास्थानम्।
 - (b) महाभारतम्— धतराष्ट्रविखाय: I
- 2. Translation from English into Sanskrit.
- 3. Sanskrit Grammar and Composition.

Arabic.

- 1. Arabic Selections for the Entrance Examination for 1908 of the Calcutta. University compiled by Shamsul Ulama Moulvi Ahmad.
 - (A) Prose pp. 1-31 (both inclusive).
 - (B) Poetry pp. 41-52 (both inclusive).
 - 2. Translation from English into Arabic.
 - 3. Arabic Grammar and Composition.

Persian.

- New Persian Solections for the Entrance Examination for 1904-1908 of the Calcutta University compiled by Shamsul Ulama Moulvi Ahmad.
 - (A) Prose pp. 1-31 (both inclusive).
 - (B) Poetry pp. 49-71 (both inclusive).
- 2. Translation from English into Persian.
- Persian Grammar and Composition.

VERNACULAR.

PAPER II .- Full Marks 50.

Bengali.

- Text—Prose— सीतार चनवास by Iswar Chandra Vidyasagar.
 Poetry—The following poems by Hem Chandra Baneriee.
 - (१) भारतभिचा (त्यनि ग्रन्थात्व... दिवानिशि नथन करे); (१) भारतिवलाए ;
 - (श) मन्त्रसाधन ; (श) कालपत्र ; (श) गङ्का ; (श) दुर्गीत्सन ; (o) जीवनमरीचिका ।
- 2. Explanation of unprepared passages from modern Bengali.

- 3. Translation from English into Bengali."
- 4. Essay-writing, correction of errors, letter-writing, summarising &c. in Bengali.

Hindi.

- Text—रामायच by Tulsidas—ऋयोध्याकाखः
 चरितावची by Harish Chandra.
- z. Explanation of unprepared passages in Hindi.
- 3. Translation from English into Hindi.
- 4. Essay-writing, correction of errors, letter-writing, summarising &c. in Hindi.

Urdu.

- 1. Text.—Revised Selections by Shams-ul-Ulama Ahmad for the Entrance
 Examination for 1909 of the Calcutta University.
- 2. Explanation of unprepared passages in Urdu.
- 3. Translation from English into Urdu.
- 4. Essay-writing, correction of errors, letter-writing, summarising &c. in Urdu.

Marathi.

1. Text.—Prose—Amachya Deshachisthiti by Chiplunkar.

Poetry—केंबा by Moropant;

नौतियतक by Vaman.

- 2. Explanation of unprepared passages in Marathi.
- 3. Translation from English into Marathi.
- 4. Essay-writing, correction of errors, letter-writing, summarising &c. in Marathi.

SECOND LANGUAGE.

English.

PAPER I.—Full Marks 50.

TEXT AND GRAMMAR.

- 1. Text-
- A) Prose—(a) Lamb's Tales from Shakespeare—"The Merchant of Venice."
 - (b) Johnson's Rasselas. Chapters I-XXII.
- (B) Poetry—(a) Southey's "Among My Books."
 - (b) Gray's "Elegy written in a Country Churchyard."
 - (c) Bryant's "Blessed are they that Mourn."
 - 2. English Grammar.

PAPER II.-Full Marks 50.

Unprepared Passages, Translation and Composition.

- 1. Explanation in English of unprepared passages in English.
- 2. Translation from the candidate's vernacular into English.
- 3. English Composition including Essay-writing and letter-writing.

Mathematics.

PAPER I .- Full Marks 50.

- L. Arithmetic (the whole).
- 2. Algebra-up to simple equations, ratio and proportion.

PAPER II .- Full Marks 50.

- 1. Arithmetic (the whole).
- Geometry—The substance of Euclid, Books I to III according to modern methods. Euclid's demonstrations will also be accepted.

History and Geopraphy.

PAPER I .- Full Marks 50.

- 1. General knowledge of the History of India.
- 2. General knowledge of the History of England.

PAPER II.—Full Marks 50.

- A General knowledge of the geography of the four quarters of the Globe and a special knowledge of the geography of India.
- 2. Elementary Physical Geography.
- 3. Map-drawing.

Drawing.

Full Marks 50.

Freehand Drawing. Letter Printing. Simple Linear or Geometrical Drawing.

Map-Drawing—freehand outline sketches of countries; insertion of principal towns, seaports etc. Demarcation of political divisions and river basins, positions of rivers and mountain ranges.

Special Rules for the Seventh Standard Examination, 1909.

For the Seventh Standard test fixed by the National Council of Education, Bengal, the candidates may offer either (I) the Secondary Literary Course, or (II) the Secondary Scientific Course.

I. The Secondary Literary Course.

				,			
	-	ts.		•	Time.		Marks
				skrit, Ar	abic or Pers	ian—	
(1)	Text and G						
	(a) Writter	n .	. гра	per	3 hours	•••	50
	(b) Oral		51	•	17	•••	50
(ii)	Translation		position-	<u></u>			
	(a) Writter	ı	. гра	per	3 hours		50
	(b) Oral		. ,,	• • •	,,	***	50
2. <i>E</i>	any one of	the follo	wing	zroups. A	A, B, and C.		
A.	History ar				_, _,		
(i)	History—						
	(a) Writter	ı	. i pa	per	3 hours		50
	(b) Oral		. , ,11	***	,,		50
(ii)	Principles of	Econom	ics				
• /	(a) Written			per	3 hours		50
	(ð) Oral	10			**	***	50
(iii)	Indian Econ	omics (De	scrintive	and Histo	orical)		•
,,	(a) Writter		•		3 hours		50 .
	(b) Oral		1,(3)		50
ъ	• •		•		**		J -
	Psycholog	-	*				
(i)	Psychology (-	•		,		
	(a) Written		. ı paş)er	3 hours	***	•
	(b) Oral			***	92	•••	50
iii)	Psychology (-				
(a)		I	рарег	***	3 hours		50
<i>(ħ)</i>	Orai	•••	11	***	**		50
(iii)	Ethics (India	an and W	estern S	ystems)			
(a)	Written	I	paper	***	3 hours	***	50
(6)	Oral	`	**	***	13	•••	50
C.	Pali, Hind	li and N	Iarathi				
(i)	Pali						
(a)	Written	1	paper	***	3 hours	***	50
(0)	Oral		**	• • •	13	***	50
(ii)	Hindi-						
(a)	Written	t	paper	• • •	3 hours		50
(8)	Qral _	• • •	**	***		***	50

	ıbjects. athi—	No. of Papers.	Time.	Full Marks
(a)	Written	ı paper	3 hours	50
(b)	Oral		#1	i.i _ 50
[C	andidates whose ve	rnacular is <i>Marathi</i> i	nust take up Ben	gali.]
3. Ess	8.V—			•
	· • · · · · · · · · · · · · · · · · · ·	ı paper	3 hours	50
	ernacular	- paper	-	50
` •		d <i>Marathi</i> shall be th	» ne only recognised	-
* T	poses of this exam		1000811100	·
	-	may be written either	in Devanagari or	in Bengali
		Economics, Psychologue of the following refarathi.		_
(c) An (d) Ti	swers in Pali may l he Essay in English	be given either in Pal and the Essay in the jects offered by the ca	e vernacular shal	~
(e) In	order to pass the I	Examination a candid	late must obtain	at least 30
•	per cent. of the	total marks in each	of the subjects	1, 2 and 3.
	If, however, a cand	idate obtains more th	an 50 per cent.	of the full
1	marks in any sub	ject, 25 per cent.	in place of 30 per	cent. in the
**	other subjects or	papers required by	the foregoing re	ule shall be
	leemed sufficient in	his case. Candidate	es obtaining 50 p	er cent. of
	the makes in the	aggregate and upwar	ds shall be placed	in the First
.,	Division, those obta	ining 40 per cent. of	the marks and	upwards in
``	he Second Division	on and the remainin	g successful cand	idates in the
	Third Division.			
~				
	II. The Sec	ondary Scienti	fic Course.	
	Subjects.	No. of Papers.	Time. Fu	ıll Marks,
1. Phys	ics and Chemis	try—		
(i) Physi	cs—	• •	,	
(a)	Theoretical	1 paper	3 hours	50
(b) I	Practical	*** ***	*** 33	50
(ii) Chem	istry :—			
(a) T	Theoretical	г рарет	3 hours	50
(b) F		*** 33		50
2. Anv	one of the follo	wing groups A ar		
_		2 papers		h io
	Jechanice & Steam		مال مال	

... do. ---- 50

· (b) Mechanics & Steam Engine 1 paper

(ii)	(a) (i	Drawing neluding exercises done in class)	}		ı paper	***	3 hours	•••	50
	(6)	Workshop Practice	e—						
		Carpenter's shop			59		6 hours	• • •	50
		Blacksmith's shop	•••		**	***	73		50
B. (i)		Biology-							
``		Zoology-							
	` .	Theoretical	***		1 рарет		3 hours		50
		Practical			**	***	15		50
	(b)	Botany-							
		Theoretical			n		3 hours	***	50
		Practical	• • •		71	•••	**		50
(ii))	Physiology—							
		Theoretical			25	•••	3 hours		50
		Practical	** "		**	***	11	• • •	50
3.	Ess	a y —							
(i)		English		I	paper		3 hours		50
(ii)		Vernacular	***		33	***	1)	***	50

(Bengali, Hindi, Urdu and Marathi shall be the only recognised vernaculars for the purposes of this examination).

- (a) Answers in the theoretical papers may be given in English or in one of the following vernaculars, viz. Bengali, Hindi, Urdu and Marathi.
- (b) Oral Examination shall form a part of Practical Examination in all subjects including Workshop Practice.
- (c) The Essay in English and the Essay in the Vernacular shall be on one or more of the subjects offered by the candidate.
- (d) In the examination in Zoology, Botany and Physiology, greater credit will be given to candidates who illustrate their answers by diagrams.
- (e) In order to pass the Examination a candidate must obtain at least 30 per cent. of the total marks in each of the subjects 1, 2 and 3. Candidates taking up subject 2(A) shall be required to pass in each of the sub-subjects (i) and (ii). If, however, a candidate obtains more than 50 per cent. of the full marks in any subject, 25 per cent. in place of 30 per cent in the other subjects or papers required by the foregoing rule shall be deemed sufficient in his case. Candidates obtaining 50 per cent. of the marks in the aggregate and upwards shall be placed in the First Division, those obtaining 40 per cent. of the marks and upwards in the Second Division, and the remaining successful candidates in the Third Division.

DETAILS OF SUBJECTS FOR THE SEVENTH STANDARD EXAMINATION (LITERARY COURSE).

ORIENTAL CLASSIC.

PAPER I .- Full Marks 50.

Written Examination.

Sanskrit.

- I. Text -Raghuvansam-Cantos I to IV.
- 2. Grammar—The Examination will be confined to testing a general knowledge of grammar by questions arising out of the Text-book.

Arabic.

I. Selections by Lt.-Col. G. S. A. Ranking, M.D., I.M.S., for the First Examination in arts for 1908 of the Calcutta University.

Prose pp. 1-73. Poetry

2. Grammar—The Examination will be confined to testing a general know-ledge of Grammar by questions arising out of the Text-book.

Persian.

New Selections by Shamsul Ulama Moulvi Ahmad for the First Examination in Arts for 1904 to 1908 of the Calcutta University.

Prose pp. 1—33,

Poetry pp. 70-96.

pp.

186-215.

2. Grammar—The Examination will be confined to testing a general know-... ledge of Grammar by questions arising out of the Text-book.

PAPER II.-Full Marks 50.

Oral Examination.

On the subjects mentioned under Paper I.

PAPER III .- Full Marks 50.

Sanskrit, Arabic or Persian.

Written Examination.

- z. Translation from English into Sanskrit, Arabic or Persian.
- s. Correction of Errors.
- 3. Original Composition.

PAPER IV.—Full Marks 50

Oral Examination.

On the subjects mentioned under Paper III.

History and Economics.

HISTORY.

PAPER I .-- Full Marks 50.

Written Examination.

- 1. A general knowledge of the histories of Greece and Rome.
- 2. History of England studied with special reference to the following points:
 - (i) The rise and progress of England's power.
 - (ii) England's work and success specially in India.
- 3. Elementary notions of the right and duties of citizenship as illustrated in the history of India.

PAPER II .- Full Marks 50.

Oral Examination.

On the subjects mentioned under Paper I.

PRINCIPLES OF ECONOMICS.

PAPER I .- Full Marks 50.

Written Examination.

Elementary Principles of Economics as in Syme's Political Economy for Beginners.

PAPER II .- Full Marks 50.

Oral Examination.

On the subject mentioned under paper I.

INDIAN ECONOMICS.

PAPER I .- Full Marks 50.

Written Examination.

1. Lectures on the study of Economics with special reference to the industrial needs of India.

(Text-book—Glyn Barlow's "Industrial India" published by Messrs. Natesan & Co., Madras).

- 2. A description of the economic features and framework of India with a view to familiarize the students with those conditions and aspects of Indian life which are to be interpreted in the light of the science of Economics This will include the following heads:
 - i. Physical features and population.
 - u. Sources of wealth.

- iii. Weights and measures, currency, exchange, insurance and banking.
- iv. Organisation of village industries.
- v. Rural and urban occupations :-

Agriculture—landholders, tenants, farm-servants, field-labourers. Stock-owners, milkmen and herdsmen, Grain dealers and money-lenders. Cotton-weavers, Silk-worm rearers and silk-weavers. Goldsmiths and blacksmiths. Potters. Tailors. Carpenters. Oil-pressers. Leather-workers and drummers. Vegetable and fruitsellers. Workers and dependents. Female occupations. Priests, astrologers, mendicants. Barbers and washermen. Brass, copper and bell-metal workers. Grocers and confectioners, &c., &c.

- vi. Factories and workshops.
- vii. Mines, (esp. collieries) and plantations.
- viii. Imports and exports.
- ix. Ports, harbours and shipping.
- x. Customs, tariffs.
- xi. Communications—railways, postal and telegraph systems, rivers, roads and canals.
- xii. Miscellaneous information.

(Text-book:—Tozer's "British India and its Trade")

3. A knowledge of the economic History of India as in R. C. Dutt's "Economic History of India".

PAPER II.—Full Marks 50.

Oral Examination.

On the Subjects mentioned under Paper I.

Psychology.—Eastern System.

PAPER I. - Full Marks 50.

SYLLABUS. .

- 1. Subject matter of Psychology. Its essentially subjective character. Its connexion with Philosophy or Metaphysics. Relation between Psychology and Ethics.
 - II. Fundamental philosophical notions.
 - (a) Two aspects of things—আবস্থাবিদ, (Phenomenal, empirical) and
 দাবলাখি ক, (Noumenal, transcendental, metaphysical, rational).
 - (b) चित् (Chit) and जह (Jada).
 - ं) चालन (Atman) and जगत (Jagat) ; प्रकृति.
 - (d) Upadhis (ভ্যাভি) and Gunas (নৃভ); Manas (নৃন:); Indriyas (ছলিম) and Tanmatras (নভ্যাম); Visayas (বিষয়) or Artha (খ্যা); Koshas (জাখ); Pranas (গ্যাভা) and Bhutas (মূন).

- (e) The Gunas (নৃত্য) and Manas (নৃত্য). Various types of individual mind as affected by gunas (নৃত্য)— Sattwik (ভা ভার), Rajasic (বাক্ষিক) and Tamasik (নান্দিক); Varieties of Sub-types.
- III Manas (मन:)—Its characteristic Vr ttis (कृष्ण) or functions, viz. Knowing, Feeling and Striving; Manas as a central organ. Views of different schools.
- IV. The Indrivas (इन्हिंग)—Inanendrivas (the five afferent senses of hearing, touch, sight, taste and smell); Karmendrivas—(the five efferent or acting senses of speaking, grasping, going, evacuating and generating). Manas as an inner (central) organ; Indrivas and Visaya (१६५५) or the objective environment; their correlation.
- V. Consciousness—Two stages (1) निर्श्चिकस्पत्र (indeterminate, without connotation and denotation), (2) स्विकस्पत्र (the ordinary self-consciousness with connotation and denotation).
 - VI. Methods of Investigation :- Twofold :
 - (1) By a process of partial or complete abstraction— থানস) Transcendental.
 - (2) By a process of reflection or introspection—(सनन) Empirical.

Characteristic distinction between the two methods of investigation.

- III. The pramanas (प्रमाप) or the sources or instruments of knowledge : views of the different schools.
 - VIII. Classification of knowldge (empirical)—
 - (a) Knowledge through Anubhaba (প্ৰায়ৰ).
 - (b) Knowledge through retention and representation—(wfa).
 - (c) Knowledge through recognition—(দল্পিয়াৰ).
 - IX. Knowledge through Anubhaba (ऋतुमक), its classification.
 - (a) Knowledge through sensuous perception (দেবাৰ, মান, আৰ্মন, ম্বীন, বাৰ্ম, ছাৰ্মন)
 - (b) Knowledge through Manas perception—(দ্বৰ)—the mind's awareness of its states of feeling, knowing and striving.
 - (c) Knowledge through Samanyalakshana (ন্যান্য ভবৰ)—(দুল্ছ).
 - (d) Knowledge through Jnanlakshana (সামন্ত্র) (মুন্তর).
 - (e) Knowledge through Anumiti (মনুধিনি) (Inferential knowledge)
 divided into three classes.)—
 - (1) पूर्ववत्, (2) श्ववत्, (3) सामान्यतीहरू ;

Another classification :--

- (I) केवलान्वयौ, (2) केवलव्यतिरेकौ, (3) कन्वयव्यतिरेकौ;
- (f) Knowledge through Upamiti (হুব্দিরি)—Analogy.
- (g) Knowledge through Shahda (東京) (Testimony or trustworthy affirmation). Views of different schools.

- X. Manas—Its function of feeling. Classification of feelings—
 - (a) Self-regarding (भोगस्वक) or the lower felings—सृख, दृ:ख, (pleasure and pain) इच्छा, देव (Desire and aversion).
 - (b) Other-regarding feelings—(নাছিল)—নিনী, (affection towards equals),—ৰহ্যা, (affection towards inferiors),—মুহিনা, (To be glad to see others happier)—ত্ত্ত্বা,— (To be indifferent to the objects of hatred): and the like.
 - (c) Sentiments—(Natural)—

attraction for the True (सस्य). attraction for the Good (शिव).

attraction for the Beautiful (सूच्र).

- (d) Spiritual Emotions: -
 - (1) Born of a desire for practising भ्रम, (यन्तरिन्द्रिय-प्रव्याद्वार).
 - (2) Born of a desire for practising হল, (মুলাহাৰ).
 - (3) Born of a desire for practising ভথবনি, (বাৰ্যনাশির্থি).
 - (4) Born of a desire for practising विविचा (चमा, सिच्चता).
- (e) Higher spiritual emotion—

Born of a desire for salvation (मुस्यूल).

- XI. Manas-Its function of Volition-
 - (1) মহন্তাস্থল (the idea that it will conduce to the attainment of the Good, attainment of pleasure or the cessation of pain).
 - (2) THE (Desire for the Good).
 - (3) कृतिसाध्यताचान (the idea that the good is attainable by effort).
 - (4) चिकीषां (Desire for action).
 - (5) चपादानप्रकच (Perception of means).
 - (6) यज्ञ (Effective will)—divided into two classes—प्रहत्त्वास्य and निहत्त्वास्य.
 - (7) चेषा—(Bodily movement).
 - (8) Conflict of desires-

र्टसायनताज्ञान and हिल्सायनताज्ञान, वसददहिल्सायनताज्ञान, वसविल्सायनताज्ञान.

PAPER II.—Full Marks 50.

Oral Examination.

On the subjects mentioned under Paper I.

Psychology-Western System.

PAPER I .- Full Marks 50.

SYLLABUS.

The subject matter of Psychology.

Method and Data of Psychology.

Subjective Processes: Ultimate division of; their correlation.

Body and Mind.

Senses and Sensations. Stimulus and Sensation.

Attention.

Retention, Association, Reproduction.

Development of Mind. Child's Development.

Perception of External Objects and Relations of the Self.

Imagination—Idea—Memory—Ideal Construction—Conception—Expectation—Reasoning—Belief.

Language.

The World and the Self.

Feeling. Pleasure and Pain.

Emotion.

Sentiments.

Action: Reflexion-Spontaneous-Instinctive-Voluntary. Habit.

PAPER II .- Full Marks 50.

Oral Examination.

On the subjects mentioned under Paper I.

Ethics-Eastern and Western Systems.

PAPER I .- Full Marks 50.

INDIAN ETHICS.

- I. Foundation of Ethics (भक्षेमुखन्).
- II. Man -- His essentially Spiritual nature; his desire for enjoyment- (भोन-
- III. The principle of प्रवित्त, (outgoing tendencies for enjoyment; passion) and the principle of निवृत्ति, (Dispassion, Self-realisation,—the realisation of his essentially spiritual nature) in man. Conflict between the two principles; hence the ethical problem.
 - IV. (a) Different stages of Spiritual development—(अधिकारमेंद्र) corresponding to the relative preponderance of the प्रवृत्ति (भीगमूखक) and निवृत्ति elements in man.
 - (b) Classification of human natures— साञ्चित्र (Highest), राजस्वित, तामस्वित, (Lowest).
 - (c) Corresponding gradations in powers and capacities.
 - (d) Corresponding gradations in powers of self-determination.
 - V. Conduct.
 - (a) Origin and classification—
 - (I) प्रवृत्तिमृत्तक, (2) निवृत्तिमृत्तक.

- Also according to classification of Natures—सास्त्रिक, राजसिक and तामसिक.
- (b) Development Progressive quality of conduct corresponding to the progressive evolution of nature.
- (c) Code of Conduct as prescribed for the different Varnas and the different Asramas in ancient India. The meaning of Varna (বর্ষ) and Asrama (মামন).
- VI. (a) Man and his power of self-determination, of conduct—its direction in relation to—
 - (1) মন্তবিমূৰক conduct, (2) দিরবিমূৰক conduct. Power of selfdermination and the Law of Karma.
 - (b) The element of कर्मुं लाभिसान in man. The समिसान and its varying influence on the सान्तिक, राजसिं and तामसिंक natures.
 - (c) The element of पालनगंग, (the dedication or consecration of the limited self to the Infinite) in man. The class of natures in which this element is most predominant.
 - VII. Man-His sense of responsibility for conduct (Moral obligation)-
 - (a) The meaning of responsibility—Ideas of merit (মৃত্যু) and guilt (মৃত্যু); rewards and punishments (হস্তু).
 - (ঠ) The law of Karma: How far it affects the question of man's responsibility and of punishment and reward. ইয় and সুৰুদ্ধাৰ,
 - (c) Sense of Responsibility—how far absolute in its character or whether differing at different stages of spiritual development (যাগৰ, বাসন্ধিক and নামন্তিক).
- VIII. The Ethical end—The Summum bonum according to the different schools, नि:श्रीयस, पासन्तिकृत्यक्ति and मीच.
- IX. Progressive realisation of the Ethical end. The proximate end and the ultimate end.
 - X. Realisation of the Proximate end.
- (1) First stages of Ethical life—enjoyment of the fruits of acts (प्रश्तिमृतक नीति, प्रश्ताम्ख्यकंग).
 - (a) For the individual.
 - (b) For the family and relations and community.
 - (c) For humanity.
- /2) The cultivation of fundamental virtues—রল্লখর্ত, শ্লীৰ (কাষিক, বাবনিক, নানবিক), নান, খান্বীয়, খান্বিনা, and the performance of prescribed duties (বিভিন্ন কর্মান্ত্রানা) and abstention from forbidden acts (নিনিয়বর্জন).
- (3) femula The gradual development of self-control or the control of the senses and the mind,

- XI. Realisation of the ultimate end-
 - (a) Renunciation of the fruits of acts-निवृत्तिमृतक नीति, निवृत्ताक्य धर्म ;
 - (b) धीग, ज्ञान, भक्ति ;
 - (c) Self-realisation: Realisation of the Infinite.

Western Ethics.

Definition and Scope of Ethics.

Method and Data of Ethics. Ethical Science.

Actions: - Moral and Non-moral.

Desire-Motive-Intention-Volition.

Moral consciousness: Elements of.

Moral Sentiment.

Moral judgment: Nature, method and Object of

Moral Faculty. Moral Obligation.

Ethical Standards.

Individual and Society.

Moral Institutions.

Duties and Virtues. Moral Progress. Moral Ideal.

PAPER II. -Full Marks 50.

Oral Examination.

On the subjects mentioned under Paper I.

GROUP C.

Pall.

PAPER I .- Full Marks 50.

Written Examination.

(1) Text-Poetry-Dhammapada, Chapters I to VIII.

Prose-Anderson's Pali Reader, Stories nos. 1 to 13 and 20 to 25.

Dhammapada Atthakatha—Yamakavaggavannana.

चक्खुप।खर्थरस्य कर्युः सङ्क्ष्ण्डलि वर्युः गुक्कतिस्सप्तेर कर्युः काली यक्तिनीं कर्युः कीसम्बद्धाः चुक्काल सङ्काला कर्युः देवदत्तस्य कर्युः

- (2) Grammar.
- (3) Translation into Pali and correction of Errors.

PAPER II .- Full Marks 50.

Oral Examination.

On the Subjects mentioned under Paper L.

Hindi.

PAPER I .- Full Marks 50.

Written Examination.

- (1) Text—Poetry—चयोध्याकास्य and सुन्दरकास्त्र of रामायस by Tulsidas.

 Prose—सन्दर्शयन्त्रगटक by Harischandra.
- (2) Grammar—A knowledge of modern Hindi Grammar.
- (3) Translation, and Composition.

PAPER II. - Full Marks 50.

Oral Examination.

On the Subjects mentioned under paper I.

Marathi.

PAPER I .- Full Marks 50.

Written Examination.

(1) Text-Marathi Fifth Book.

राचीचा लाहिर नामा, चसक तुकारामाचे, सहस करन येथे, प्रसङ्गवधान, दासवीधातीस नरदेश्वप्रयंसा, रामदासाचे घभड़, ताल महास ; वर्ष शास्त्र-- किसतीविषयी, वेतना-- विषयी, श्रीसम चापि गरीन, भास्त्रस्वाविषयी, सरकारदेख्याविषयी, भाष्ट्राने देखे छेथे, यमविभाग । मोरीपनौ घेनुहरच भाग पहला व दुसरा, वेरुवालवस्त्री स्थी, चहत्वा वार्ष होस्तररीय, खोल्याचा रचनेविषयी देवाचे चातुर्थ, खानुँची प्रति, सुश्रामा भाग १ ते ६, भीरीपनौ उत्तरगोयहच माग १ १ ६, प्रियास गुरुवा अस्तरीय.

- (2) Grammar.—ৰাৰবীয় আৰুৰে—Book II. by Joshi.
- (3) Translation and Composition.

PAPER II.-Full Marks 50.

Oral Examination:

On the subjects mentioned under Paper I.

Bengali.

(For candidates whose vernacular is Marathi)

PAPER I .- Full Marks 50.

Written Examination.

(1) Text—Prose—Charupatha Part I by Akshay Kumar Datta.

The following pieces :—

विवासिका, चामेर्यागरि, वितासातार प्रति व्यवद्वार, जसप्रपात, सदिशेर
वीविद्याभन, शारीरिक सास्प्रविधान, नौतिस्व.

Poetry—Krittivasa's Ramayana edited by Jogendra Chandra Basu, the following pieces:—

> रामायचेर उत्पत्ति, श्रीरामचन्द्र, सीतादेवी एवं खचचेर वनतमन, श्रीरामचन्द्रीर विश्वाप भी सीता भन्नेवस, सीतार पातालप्रदेश.

(2) Translation and Composition.

PAPER II .- Full Marks 50.

Oral Examination.

On the subjects mentioned under Paper I.

II. The Secondary Scientific Course.

PHYSICS.

PAPER I .- Full Marks 50.

Theoretical.

Velocity. Acceleration. Mass and weight. Momentum. Force. Moments. Machines. Falling bodies. Gravity. Stability. Pendulum, Fluid Pressure and its characteristics and applications. Friction. Collision. Work and energy. Conversion of energy into heat. Mechanical equivalent of heat.

Thermometry. Calorimetry. Hygrometry. Conduction. Cooling. Elementary notions of Steam Engine.

Vibratory movements. Propagation through air. Pitch and loudness of Sound. Vibration of strings and columns of air. Relation of pitch to length. Resonance. Chladni's figures with vibrating plates.

Rectilinear propagation of light. Shadows. Reflection. Refraction. Dispersion. Curved mirrors. Lenses. Magnifying glass. Real and virtual images,

Magnetic polarity. Magnetisation and induced magnetisation. Compass needle. Freely suspended magnetic needle.

Electricity. Electrification. Electrical actions. Electroscopes, Conductors and insulators. Induced electrification. Screening action of metals. Electrophorus. Discharge phenomena. Electrical machines.

Voliaic cell. Daniell. Grove. Bunsen. Standard cell. Electromotive force. Resistance. Branched circuits. Heating, chemical and magnetic action of currents. Action of currents on currents. Solenoids compared to magnetic needles. Motors. Distant signalling.

Ganot's "Popular Natural Philosophy" is recommended.

PHYSICS.

PAPER II.—Full Marks 50.

Practical.

(Oral-12, Manipulation, method & result-38).

Construction of Scales.

Use of verniers, Screw-gauge, Callipers and Spherometer. Measurement of area by dividing the area into millimetre squares.

Measurement of volume of a solid by liquid displacement.

Simple pendulum and determination of "g".

Atwood's Machine, Hook's law and Young's Modulus.

Specific gravity by Hydrostatic Balance, by hydrometer, by specific gravity flask, and by Hare's apparatus.

Barometer (reading without correction).

Boyles' Law apparatus.

33

Heat :--

Determination of the melting point of wax or paraffin.

Specific heat.

Latent beat.

Dew point.

Coefficient of linear Expansion. Thermometer testing. Construction of water Thermometer, Constant pressure and Constant Volume Air Thermometer. Maximum density of water.

Sound-

Determination of frequency by siren, Resonance column, Laws of Vibrations of a stretched string and determination of frequency by Sonometer, Velocity of Sound in gases and in Solids by Kundit's Method.

Light-

Verification of the Laws of reflection and refraction by pin-method.

Determination of the angle of a prism by

do.

- .. Index of Refraction of a glass plate and a prism do.
- ... Radius of curvature of a concave mirror by do.
 - Focal length of lenses.

Use of Sextant, Comparison of intensities of different sources of light. Radius of curvature of Concave & Convex mirrors. Index of refraction of a prism by minimum deviation.

Magnetism-

Construction of small magnets and magnetic needles. Tracing the magnetic lines of force of a magnet and localising the poles of same.

Experiment shewing variation of the strength of a magnet from one pole to the other.

Comparison of the strengths of two magnets.

Electricity-

Production of electricity by friction. Positive & Negative electrification. Electrification by Conduction & Induction.

Working of an Electrophorus. Setting up of Voltaic cells of different types. Connection of cells in series. Connecting of Cells in parallel.

Measurement of E. M. F. by meter bridge.

resistance " "

Action of current on magnetic needles, hence finding the direction along which current is flowing.

CHEMISTRY.

PAPER I .- Full Marks 50.

Theoretical.

Study of the following substances:-

Oxygen. Hydrogen, Water. Carbon. Oxides of Carbon. Carbonates. Air. Nitrogen. Nitrous and Nitric Oxides. Nitric per-oxide. Nitric Acid and Nitrates. Ammonia and Ammonium salts. Chlorine, Bromine, Iodine and their principal compounds.

Silica. Silicic Acid and Silicates.

Sulphur, Oxides of Sulphur. Sulphurous and sulphuric Acids.

Hydrogen Sulphide and sulphides of metals.

Phosphorus. Oxides. Phosphoric Acid.

Elementary principles of Chemistry, including Atomic Theory and Atomicity.

Potassium, Sodium, calcium, zinc, copper, mercury.

PAPER II. - Full Marks 50.

Practical.

Preparation and determination of the properties of-

Oxygen, Hydrogen, Carbon, Nitrogen, Ammonia, Chlorine, Bromine, Iodine, Silica, Sulphur, Phosphorous and their important simple compounds.

Detection of Potassium, sodium, calcium, Zinc, copper and mercury in their compounds.

GROUP A.

PAPER I .- Full Marks 50.

Mathematics.

- r. Algebra—Quadratic Equations, Theory of Quadratic Equations and Quadratic Expressions; Arithmetical, Geometrical and Harmonical Progression; Permutation and Combination; Binomial and Exponential Theorems; Logarithms.
- 2. Geometry—Substance of Euclid, Books I to III and Book VI., Props. I to 19 according to modern methods. Euclid's demonstrations will also be accepted. Elementary properties of the parabola.

PAPER II.-Full Mark 50.

- 1. Plane Trigonometry-Up to the Solution of Triangles.
- 2. Elementary Statics—as in Loney's Elementary Statics.
- 3. Elementary Dynamics... ,, Dynamics.

Drawing.

ONE PAPER-Full Marks 20.

Class-exercises— ,, 30.

Free-hand drawing. Simple linear Geometrical drawing and simple Projection Machine drawing—Rough sketches from models and working drawings of the details of machinery.

Exercises in drawing done in class will also be examined.

Mechanics and Steam Engine.

Full Marks 50.

(Written examination).

Machines—Force, Work, H. P., Friction and Principles of lever.

Steam and the Steam Engine—Simple examples in mensuration and questions on heat relating to steam.

Work-shop Practice.

CARPENTERS, SHOP.

Full Marks 50.

Practical and Oral.

The examination will be held on two days for 3 hours each. Candidates will be required to show that they know how to use and handle properly the tools used for the purpose of Carpenter's, Joiner's and Pattern maker's work by preparing simple articles of furniture and simple details of machines.

Blacksmiths' Shop.

Full Marks 50.

Practical and Oral.

The examination will be held for 3 hours each on two days. Candidates will be required to prepare simple forgings and details of machines.

GROUP B.

BIOLOGY.

I. Zoology.

PAPER I .- Full Marks 50.

Theoretical.

- 1. The Classification of Zoology.
- 2. General Morphology and Physiology of the cell and of the simple tissues; cell division.
- 3. The general characters of the Protozoa; its classification and relation to Malaria.
 - 4. The structure and life-history of a leech.
- 5. The general character of the Arthrapoda and of their leading subdivisions. The structure and life-history of an Indian lobster and a cockroach.
 - 6. The structure of the Robit fish.
 - 7. The structure and life-history of a frog.
 - 8. The structure and life-history of a Pigeon, more especially the skeleton.
 - q. The general characters of the mammalia.
- 10. The structure of a Goat and a Rabbit, more especially the skeleton, and the digestive and circulatory systems.
- N. B. Greater credit will be given to candidates who illustrate their answers by diagrams.

PAPER II. - Full Marks 50.

Practical.

- 1. The use of the simple and compound microscopes. A general acquaintance with the histology of the cell and the elementary tissues of the animal body.
- 2. Dissection of the Leech, the Indian Lobster, the Cockroach, the Frog. the Robit fish, the Pigeon, the Goat and the Rabbit.

II. Botany.

PAPER I .- Full Marks 50.

Theoretical.

- 1. Morphology of Phanerogamous plants, Roots, Stem, Leaves, Inflorescence, Flowers and Fruits.
- 2. Principles of Classification. Outlines of any one of the Modern Systems of Classification.
 - 3. The order of Leguminosae.
- 4. Elementary Histology—structure and formation of cells, Union of cells into tissues; principal types of tissue; tissue systems.
 - 5. Elementary Plant Physiology.
- N. B. Greater credit will be given to candidates who illustrate their answers by diagrams.

PAPER II .- Full Marks 50.

Practical.

- z. Use of simple and Compound microscopes.
- 2. Morphology-Roots, Stems, Leaves, Flowers, Fruits.
- 3. Dissection of Flowers.
- 4. Referring plants to the natural order Leguminosae.
- 5. Microscopical examination of Cells, Tissues, Starch and Cellulose.
- 6. Chemical Examination of starch and cellulose.

PHYSIOLOGY.

PAPER I .- Full Marks 50.

Theoretical.

The structure of the animal body.

The human skeleton—a general view of the contents of the cranial, thoracic and abdominal cavities.

The limbs-joints, mechanics of motion, contraction of muscles.

Elementary chemistry of the blood and urine.

Food-digestion, absorption.

Blood-its circulation.

Respiration.

Production and regulation of animal heat.

Secretion and excretion.

General view of the physiology of the nervous system.

N. B. Greater credit will be given to candidates who illustrate their answers by diagrams.

PAPER II. - Full Marks 50.

Practical.

- General acquaintance with the Simple and Compound microscopes.
- 2. Dissection of a goat.
- 3. General acquaintance with the important bones of the Human Skeleton.
- 4. Examination of urine qualitative only).
- 5. Demonstration of blood corpuscles under the microscope.
- 6. Practical demonstration of the mechanism of respiration in its relation to atmospheric pressure by the help of the air-pump.
 - 7. The anatomy of the Human Brain-elementary knowledge only.
 - 8. Topography of the heart, kidneys, liver, spleen and the large Intestine.

Date of Holding the Seventh Standard Examination, 1909.

LITERARY COURSE.

Written Examinations.

SCIENTIFIC COURSE.

Written Examinations.

Wednesday (16th June - {10 A.M. to I P.M.—Drawing, Physiology—Paper I. 2 to 5 P.M.—Mechanics and Steam Engine—Paper I. Thursday (17th June)—{10 A.M. to I P.M.—Essay, English—Paper I. 2 to 5 P.M.— Normacular—Paper II.

Practical and Oral Examinations.

The Practical and Oral Examinations, will be held on the 18th June and the following days, and the exact dates will be notified at the time of the examination.

NOTE

ON THE DEVELOPMENT OF A NATIONAL SYSTEM OF EDUCATION

FOR

THE BARODA STATE

BY

T. K. GAJJAR, B. Sc., M.A.,

SOMETIME DAKSHINA FELLOW, ELPHINSTONE COLLEGE, PROFESSOR OF CHEMISTRY, BARODA COLLEGE.

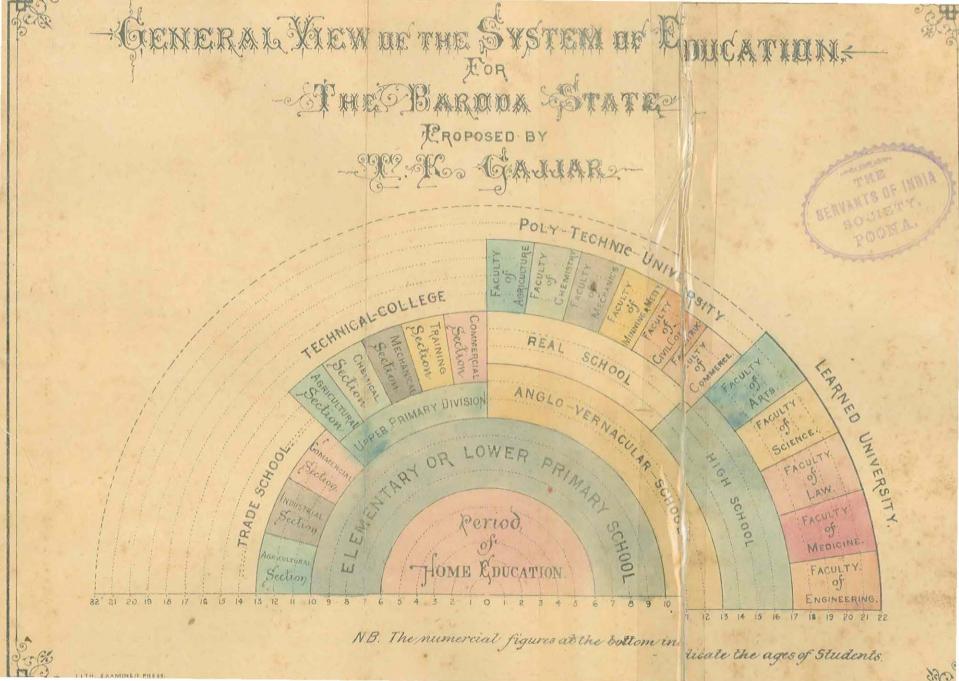
".... The education of the people has within itself an inherent life which can never perish, and which will throw out new and ampler growths from generation to generation."

SIR W. W. HUNTER.

Bombay:

PRINTED AT THE "EXAMINER PRESS" FORT.

1888.



Note on the development of a National System of Education for the Baroda State.

His Highness the Maharaja Saheb having expressed his desire to introduce the Technical Branch into the present system of education in the Baroda State, it occurred to me that this could not be effectively done without a re-organization of the entire scheme in vogue at present, and I set about constructing a National System of Education which should provide means of imparting various kinds of instructions suited to the position and circumstances of pupils in various grades of life. extremely laudable object of His Highness to advance the interests of his subjects by imparting to them the benefits of a high-class education, would be only partially attained by attending to Technical instruction alone. Man is a many-sided being, and as the object of all education is to secure his happiness, it follows that the education proper to be given should be such as to satisfy all his wants. Undue development of one side of man often results in the dwarfing of the other instincts, and the product is not on the whole very enviable. What is true in the case of the education of an individual is much more so in the case of the education of a nation. Accordingly there never can be too much time and labour spent upon the sketching of a general plan of education, before its portions are taken up. I am aware that from various causes, such as the want of appliances, teachers, funds, &c., it will not be possible for any one State to attempt to cover the entire field of knowledge. But for that very reason, I think, it is necessary that the entire scheme should be before the mind of the statesman before he sets his hand to the development of any particular branch of

knowledge or skill. With every change in a nation's circumstances, there will be a change in the particular branch of instruction which is considered the most important of all; and if each is attended to separately without regard to the whole. an incongruity may result, which it will require great effort to undo. In this view, I have formulated a scheme, and submit it for consideration. I have condensed my ideas on the subject in the shape of a semi-circular diagram which will show the correlation of the several institutions for developing various branches of knowledge and skill, and I propose to expound my scheme in reference to that diagram which may be considered the key-note thereof. Before I enter into details I might premise that the diagram is made in view of what a State may properly undertake to do in furtherance of the education of its subjects. For various political reasons, State action in this matter has to be confined within definite limits which cannot be ignored in the settlement of a scheme. It is for such reasons that I have limited my scheme to the first twenty-two years of a man's life; else I am not unmindful of the fact that pursuit of knowledge and skill is the life-long occupation of man during his sojourn in this world. Again physical and moral education has been excluded from the diagram, not because I do not properly value them, but because I consider them as essential to the well-being of man in all stages of life as the supply of necessaries, and therefore an indispensable portion of the curricula of every institution I have named. The inattention at present shown to those branches is deeply lamentable, and I cannot too earnestly crave the early adoption of steps to counteract the mischief caused thereby. No separate place has been given to them in the diagram because there need not be special institutions for them.

HOME EDUCATION.

Beginning with the centre of the diagram, the first six years of infancy are assigned to home education. Much can be done in this period in the way of inculcating habits of observation and steadiness; but as I am concerned in the present scheme with governmental action alone in National education, the question of home education is outside the limits I have set to myself. I will, therefore, say nothing about it. It is said that human brain begins to develope at the age of seven, thus marking the period when the child by the opening of its intellect comes within the range of State action.

PRIMARY EDUCATION.

The first period of school education commences with the seventh year, and ends with the tenth year, during which time a boy receives what is called Primary or Elementary Education. It comprises the first four Vernacular Standards, which are framed with a view to educate youths in reading, writing, and arithmetic, or the essential mechanism of instruction. Those whose circumstances do not permit them to continue their studies further and who have to leave school at the end of this period are furnished with little more than three 'Rs.' without knowing the use and application of them. Reading and writing are useless, if the boys do not learn something useful, interesting and worth reading or writing about, in the same way arithmetic is useless if the pupil has not learnt something that can be set down in figures.

What I propose, therefore, is that, along with the processes of reading, writing and counting, an elementary knowledge of the subject-matter of these processes should be imparted.

- · With respect to the nature of the subject of instruction in Public Elementary schools, the Royal Commissioners on Technical education make the following recommendations:—
- (a). That rudimentary Drawing be incorporated with writing as a single elementary subject, and that instruction in elementary Drawing be continued throughout the standards.
-That drawing from casts and models be required as part of the work, and that modelling be encouraged by grant.

- (b). That there be only two class subjects, instead of three, in the lower division of Elementary schools, and that the object lessons for teaching elementary Science shall include the subject of Geography.
- (d). That proficiency in the use of tools for working in wood and iron be paid for as a "special subject," arrangements being made for the work being done, so far as practicable, out of school hours. That special grants be made to schools in aid of collections of natural objects, casts, drawings, &c., suitable for School Museums.
- (e). That in Rural schools instruction in the principles and facts of agriculture, after suitable introductory object-lessons, shall be made obligatory in the upper standards.

The following are some of the recommendations regarding Primary education of the Indian Education Commission:—

- (1). Primary education be regarded as the instruction of the masses through the Vernacular in such subjects as will best fit them for their position in life, and be not necessarily regarded as a portion of instruction leading up to the University.
- (9). The standards of primary examination in each province be revised with a view to simplification, and to the larger introduction of practical subjects, such as Native methods of arithmetic, accounts and mensuration, the elements of Natural and Physical science, and their application to agriculture, health, and the industrial arts; but no attempts be made to secure general uniformity throughout India.
- (12). Physical development be promoted by the encouragement of Native games, gymnastics, school-drill and other exercises suited to the circumstances of each class of school.

I will now proceed to submit a few general suggestions for the practical organization of Primary schools.

I would, at the out-set, remark that the number of Primary schools is inadequate. In round numbers there are about 250 schools under the Vernacular department of the State; taking care of 25,000 pupils. Referring to the Census details, it will be observed that the number of boys whose ages range from 6 to 12 is 200,000. If schools are to be established for the instruction of all these youths, the present number will have to be multiplied eight-fold. Such a provision would, however, be unnecessary until Elementary education is made compulsory. It is not for me to discuss the question from a statesman's point of view; but I will take leave to remark that an elevation of the general National standard would be impossible without the adoption of some apparent stringency for ulterior good. It is hardly to be expected that people will avail themselves of the appliances and means placed at their disposal by the State, and the evil of encroachment on individual liberty by making Elementary education compulsory will be more than counterbalanced by the good it will bring in its train. However until this is done, it may fairly be assumed that only half the number of boys between 6 and 12 will care to attend schools. Thus the State should open in all 1,000 Primary schools. The Administration Report of 1884-85, says that His Highness has sanctioned the opening of thirty additional schools every year. If this far-sighted and benevolent policy of His Highness the Maharaja Saheb be continued for twenty years more, there will be sufficient schools for the present needs of the people.

Next with a view to improve the quality of these schools, I beg to propose that the curriculum in force may be thoroughly revised, so as to carry into effect the recommendations of the Commissioners. I do not wish that any practical subject should be introduced into any of the first four Standards, but I would wish that the rudiments of general Science must be introduced in the third and fourth Standards. Full effect must be given to the practice of giving object-lessons. Gym-

nastics and Drawing should be introduced in the third and fourth Standards.

For carrying out all these reforms, the Reading series will have to be revised and compiled again. Sir Theodore Hope's series in the words of the Indian Education Commission, affords an admirable instance of what school books should be; but events have not stood still since they were written. I therefore beg to propose that a Committee of competent men be formed to revise the present series or to publish altogether a new one and also to compile such other text books as may be necessary for the new Standards.

Lastly, with respect to the Primary schools, I beg to draw attention to a point that is of main importance.

Any one who has visited a village school of this country has been painfully struck with the want of good and efficient teaching Mechanism—both living and material—of the Elementary schools. Something has indeed been done of late to improve matters in this respect by the State but I hope it will be no disparagement to say that the present arrangements can yet admit of further improvement.

I would propose that at least four School-masters who have been taught not merely the things they have to teach, but also the principles and practice of teaching, should be sent to these schools on decent salaries. As for the Material appliances, I beg to propose that every school must be furnished with a collection of select works useful for Elementary education, a small Natural History Maseum containing a few objects, materials and models for drawing, Gymnastic apparatus and some of the Kindergarten gifts.

TRADE SCHOOL DIVISION.

In the diagram, after leaving the arch of Primary Education there will be seen three chief divisions of the next concentric arch, viz., 1, Trade School; 2, Upper Primary Division; and 3, Anglo Vernacular School.

I shall begin with the consideration of Trade School Division, of which we have no analogue in our present Educational System. There are several students who cannot afford to continue abstract and pure studies long, and wish to learn the practical applications of theory to their own business. This Division is intended to serve as finishing education of such students. According to the varying requirements of different districts, the Trade-school-will have to be divided into three sections .-- Agricultural, Industrial and Commercial. It is not necessary to have separate institutions to be styled Trade-Schools. What I propose is that one or two or three of these sections may be incorporated with the Primary schools at convenient centres. Suppose the district is agricultural and pastoral; then the agricultural section only should be added to one out of every three or four Primary schools of the district, which would be the principal school of that portion of the district and the rest will serve as feeders. If the district is mercantile or manufacturing, commercial or industrial section should be opened in connection with one of the Primary schools. In important villages we shall have thus what may be called Village Agricultural School combining within themselves the Primary school and the agricultural section of the Trade school division, as most of the inhabitants of villages are farmers and agriculturists, while in towns we shall have what I may call Town Trade schools combining within themselves the Primary school together with the Industrial or Commercial section or both of the Trade school division.

• It will be seen from the diagram that the course of each of these three sections extends over three years. The following are the Programmes of Studies which I submit for consideration.

AGRICULTURAL SECTION.

Agricultural Chemistry.

"Book-Keeping.
Levelling and Surveying.
Botany—Economic.
Veterinary Science.

The course of studies of this section should be nearly on the same level with those prescribed for the Elementary examination of the Science and Art department of England,

INDUSTRIAL SECTION.

Scientific Education.

Model and ornamental Drawing.
Geometry applied to Design.
General Arithmetic and Book-keeping.
Mechanics including Mechanical calculation.
Technical Chemistry.
Elements of Natural Philosophy.

Manual Education.

The students may be permitted to select any one or more of the following trades and crafts:—

Modelling in Fine Clay or in Wax. Carving in Wood.

Moulding and carving in gypsum.

" In sand and in Wax.

Chipping and Filing.

Casting in Bronze.

Shaping and Planning.

Drilling.

Turning in wood.

Turning in metal.

Chasing in the Lathe.

Pressing, Stamping and Coining.

Forging.

Soldering.

Burnishing.

Embossing.

Chasing.

Engraving.

Etching,

Scouring.
Varnishing.
Nickel-plating.
Fire gilding.
Galvanising.

COMMERCIAL SECTION.

Commercial Arithmetic—Accounts and Book-keeping.
Knowledge of Goods.
Political and Commercial Economy.
Commercial Geography.

" Correspondence in Gujerati.

Two additional teachers who have received a certificate from the proposed Technical College of the State should be provided for each of these sections of the schools to which any of them be attached.

The requisite material appliances of instruction must also be supplied to these Trade-school divisions.

UPPER PRIMARY EDUCATION.

This corresponds to the fifth and sixth Vernacular Standards of the present system, and in the proposed system occupies the intermediate position between the Lower Primary School and the Technical College. It is thus preparatory for those students of the Primary schools who wish to prosecute further studies in general theoretical subjects and ultimately to join the Technical College. The provision for this preparatory general education may be made in some of the central Primary Schools in the same manner as for the finishing sections of the Trade Schools, and no separate schools are required for this division.

The Primary Schools thus formed may be classified as: follows:—

(1). Elementary School intended for Lower Primary Education, i. e., teaching the first four Vernacular Standards.

- (2). Village Agricultural School comprising the Lower Primary and Agricultural Sections.
- (3). Upper Village School having Lower Primary, Upper Primary, and Agricultural Sections.
- (4), Town Schools having Lower Primary and Upper Primary Divisions.
- (5). Town Industrial Schools, combining within themselves the Lower Primary, Upper Primary and Industrial Schools.
- (6). Town Commercial Schools having the Lower Primary, Upper Primary, and Commercial Sections.

The Syllabus of the subjects of instruction will be as follows:—

Subjects of Instruction for the Upper Primary Division.

Mathematics.—

- (1.) Arithmetic, Complete.
- · (2.) Geometry, Euclid Book I.

Vernacular language including Grammar and first principles of style and composition.

Botany-Structure and functions of familiar plants.

Zoology-Principal Mammals.

History of India, complete—with some notions about its Administration.

Geography of India, Commercial, Political and Agricultural. Physical and Mathematical Geography—Elementary notions.

Human Physiology and Hygiene—The most important facts useful for the preservation of health.

Geology of the District. Caligraphy and Drawing:

For the Upper Primary Section two additional teachers who have received the license as trained teachers from the proposed Technical College should be provided in each school

to which this Section may be connected.

ANGLO VERNACULAR MIDDLE SCHOOL DIVISION.

According to the rules in force the students who have passed their Vernacular V. Standard examination are only admitted to the Anglo-Vernacular Schools. I beg to suggest that the rule should be relaxed a little in order to establish uniformity and admission may be made from those who have passed their IV. Standard examination which is the final test of the Lower Primary School.

The first three English Standards are taught in these schools, and they are framed with a special view to prepare students for the High School whose sole object is the Matriculation examination. I do not see any reason why the influence of Matriculation should be carried down to the Anglo-Vernacular Schools.

Instead of the present Standards which include no portion of useful knowledge, I beg to suggest that subjects prescribed for the Upper Primary Division be all taught with the addition of the English Language which should occupy the place of the second language, the medium of institution being Vernacular.

The head teacher of these institutions must be a graduate of the Bombay University or one having a diploma of the proposed Polytechnic University. All other men or teachers are to be selected from those who have received education either at the High School or the Real School of the new system.

TECHNICAL COLLEGE.

In the diagram on the top of the Upper Primary Division is placed the Technical College. The chief duty of this College is to serve as a finishing institution for those Middle Class Professional men who cannot afford to learn the English language and then take the benefit of University Education either literary or technical. I would recommend that four such institutions should be established at the capital cities of the four districts.

At present there exists in Baroda a Training College whose chief object is to supply well trained teachers to the Vernacular Schools of the State. This institution itself may be so expanded as to perform all the functions of a Technical College.

Students will be admitted to these colleges principally from those who have passed the final examination of the Upper Primary Section. The admission should not, however, be restricted to them, but some of the students of the three sections of Trade school Division, who may have attained distinction or shown special aptitude for higher courses of study, may also be given admission.

The practical organisation of these colleges will greatly resemble that of the central Technical University. The chief differences may be enumerated to be these:—(1) The medium of instruction will be the Vernacular language; (2) The treatment of subjects will be less elaborate; (3) The scope will be limited, (i.e.) the institution will be developed in fewer sections

As for the curriculum of these institutions, I would beg to refer to the Programme of Studies laid down for a Polytechnic Academy at Surat in a pamphlet which was published by me in the year 1886.

Professional staff of the Technical College.

Professor of	f Chem	istry a	and	Physics	and		
Principal	of the C	ollege	,	***	from	Rs. 200 to Rs.	400
Professor of	Mathem	atics	•4•		***	" 100 to "	200.
Professor of	Biology		***	***	***	Ditto.	•
Professor of	Geolog	y, Mir	eralo	gy and	Geo-		• :
graphy					***	Ditto.	
Professor of	Agricult	ure	*** ,	541	•,1	Ditto.	•
Professor of Mechanical Engineering						Ditto.	
Professor of	Langua	ges	***	***	440	Ditto.	
Professor of History and Philosophy						Ditto.	
Teachers of					evel-	•	
ling	•		***	***		"75 to "	150
Gymnastic I	faster	***	***	•*•	491	" 50 to . "	

When the central Technical University will be fully developed, this entire staff will be supplied from the graduates of the University.

As for the material Mechanism of these colleges I may merely say that Museums, Laboratories, Collections, Workshops, Drawing and Modelling rooms, experimental farms must all be of a similar nature to those provided for the Central University to be described hereafter, with this difference that they should be on a smaller scale here.

THE REAL SCHOOL.

This is altogether a new addition to the existing system of education, and corresponds to the modern or scientific schools of Europe which are styled Real Schülen (Schools) in Germany. This school is intended to lead the students of the Anglo Vernacular schools to the Polytechnic University, and so far it has a preparatory function. But it has yet another duty to perform, viz., to serve as a finishing school for those students who wish to have liberal education and also ordinary knowledge of the English language; in fact for those who wish to present themselves at the recently created Final School examination of the Bombay University with a view to enter Government Service.

Looking to the present state of matters, High Schools are regarded as merely Preparatory schools for the Matriculation examination. The Indian Education Commission says that "the attention of students is too, exclusively directed to University studies, and that no opportunity is offered to the development of what corresponds to the 'modern side' of schools in Europe. It is believed that there is a real need in India for some corresponding course which shall fit boys for Industrial or Commercial pursuits, at the age when they commonly matriculate, more directly than is effected by the present system.

"The University looks upon the entrance examination, not as a test for the fitness of duties of daily life, but rather as

a means of ascertaining whether the candidate has acquired that amount of general information and that degree of mental discipline which will enable him to profit by a course of liberal or professional education. In these circumstances, it appears to be the unquestionable duty of that department of the State which has undertaken the control of education to recognise the present demand for educated labour in all branches of Commercial and Industrial activity and to meet it so far as may be possible with the means at its disposal." The Honourable Mr. Justice (now Sir) West, late Vice-Chancellor of the University of Bombay has expressed his views on the point in the following terms. "The preparation for ordinary business may with advantage proceed up to a certain point along the same course as that for literature and science. It is a defect of our system as I understand it, that it does not provide for a natural transition to the further studies which may be the most proper for a man of business, not even propose to encourage and conduct such studies. When a boy reaches the age of about fourteen, he may have plainly shown that he has not the gifts that would make him a good subject for literary culture. His tastes or his circumstances may disincline him to be an engineer or chemist. He ought not then to be forced on in a line in which failure is almost certain. He should be put to work on matters that he really can master, unless quite exceptionably dull, such as arithmetic, rudimentary economics, mercantile Geography, the use of manures, or others determined by the locality of the school and its needs." The Commissioners then proceed to dilate on the same point and ultimately recommend "that in the upper classes of High Schools there be two divisions, one leading to the Entrance examination of the Universities, the other of a more practical character, intended to fit youths for commercial or non-literary pursuits." The curriculum of High Schools includes Elements of Chemistry, Mechanics, and Astronomy. The instruction even in this portion of science is not quite up to the desired mark. Mr. Justice West has aptly said: "In Physics, and Natural Science

the deficiency is simply lamentable, and general information means general ignorance."

Thus the necessity of this modern side in High Schools has been fully recognised and my proposal for these Real Schools is based upon it.

These Real schools need not be altogether separate and independent institutions. Economical considerations lead me to propose that they may be established in connection with the High schools or even with the Technical colleges. Under this arrangement the teachers of the High schools or Technical colleges with the addition of a few more teachers will be able to conduct these schools efficiently. I wish that some of the Anglo-Vernacular schools may also be extended and Real Schools may be added to them.

The medium of instruction in these schools is intended to be the Vernacular language, and English to be taught as a necessary second language.

SUBJECTS OF INSTRUCTION FOR REAL SCHOOLS.

First year-corresponding to Standard IV.

Mathematics.

Commercial Arithmetic.

Accounts-courses preparatory to Book-keeping.

Geometry.

Physics—general properties of bodies and heat, and its applications.

·Chemistry—metalloids.

Geography of India-agricultural, industrial, and commercial.

Geology-study of the district.

Botany-elementary notions of vegetable Physiology.

Zoology-birds, reptiles, fishes and insects.

The Gujerati language.

The English language.

History of India and leading facts of Ancient History.

Caligraphy and Drawing.

Second year.

Mathematics.

Algebra.

Geometry-descriptive mechanics.

Accounts and Book-keeping.

Physics-accoustics, optics, and electricity.

Chemistry—Metals.

Geography—Commercial.

India considered in her relations with other countries.

Astronomy.

Geology.

Botany—Systematic, distribution of plants.

Zoology—Animal Physiology; Classification of animals. Gujerati—Course of Literary composition and History of literature.

English-

Ethics-Private Morality.

History of India and leading facts of Modern History.

Principles of Legislation.

Drawing.

Third year.

Mathematics :--

Algebra.

Geometry—Descriptive.

Mechanics and Mechanism, application to Local Industries. Accounts, Exchange, Finance.

Physics—Recapitulation and Development of the most important points.

Chemistry-applied to Industrial manufacture.

Geology.

Meteorology.

.- Betany-Agricutural and Industrial.

Zoology in its relation to Agriculture and Industry. Hygiene and Human Physiology.
Gujerati Exercises in Special Literary Composition.
English—
Ethics—Public Morality.
History of India—British Period in detail,
History of Industrial Invention.
Commercial and Industrial Legislation.
Rural, Commercial and Industrial Economy.
Drawing.

THE HIGH SCHOOL.

THE LEARNED UNIVERSITY.

There exists in Baroda at present an Arts College teaching up to the Previous Standard. In the beginning of the last year a B. Sc. class was opened in connection with the College, with a view to encourage scientific education. Looking to the B. Sc. curriculum, it will be seen that the aim of this Science course is mainly to impart theoretical scientific education to the students without any reference to practical applications, in other words it is disciplinary or non-technical. The B,

Sc. class here has not attracted sufficient attendance, nor is there any prospect of matters improving in view of the fate of that class in the other colleges of the Bombay Presidency, Besides there will remain no necessity of continuing this class when the Polytechnic University already referred to would be established where ample provision would be made for all the useful branches of knowledge. Thus the B. Sc. curriculum may be dropped in course of time. In its stead the full Arts course may with advantage be adopted, if found necessary. In regard to the Faculties of Medicine, Law, and Engineering, I would omit them in this scheme on the ground that for Engineering a distinct place will be given in the Polytechnic University and as regards Law and Medicine, the limited scope which Baroda presents for these professions, and the high expenditure requisite for maintaining institutions therefor make it advisable that Baroda should draw upon the University of Bombay for that purpose.

THE PULYTECHNIC UNIVERSITY.

At the head of our system of Real Education stands the Polytechnic University, as we have got the Learned University of Bombay at the head of humanistic education. Here we must give the highest degrees and diplomas to our Technical men who would occupy the place of Professional leaders and future teachers of the State. This will be the central place of not only radically and substantially improving indigenous industries but also for the emanation of new manufactures. The influences of this metropolitan institution will be radiated in all directions.

As all other subordinate institutions will be merely reproductions of this on a small scale, the utmost care and foresight are needed for its constitution and development. The task of formulating a scheme for such a grand institution which is destined to promote the Material and Moral welfare of the whole province of Gujarat that has always been forward in Agriculture, Industry and Commerce, seems formidable. Any

attempt on my part to suggest a practical scheme should be looked upon simply as tentative and is intended to serve to attract the attention of eminent educationists and far-sighted statemen.

CONDITIONS OF ADMISSION.

Candidates for admission must have gone through the regular course of instruction of the Real School and must be prepared to submit themselves to an Entrance examination to be held annually by the Professors of the institution. Besides these students may be taken from those who have passed either the Matriculation or the Final School examination of the Bombay University. Some of the students of the Technical College who have shown specials aptitude for advanced studies may also be admitted. All these students shall have to follow the prescribed order of studies as will be detailed presently and will be entitled to the Diplomas of the University.

THE MEDIUM OF INSTRUCTION.

Before proceeding to lay down the courses of instruction I may say a few words about the medium of instruction to be adopted at the University. We must acknowledge the sad truth that our Vernaculars possess very few Scientific works and even these few treat the elements of two or three sciences merely. I have not yet come across a single work on Applied Science worthy of the name published either in Marathi or in Gujerati. The phraseology of science is not even settled as yet. Under such circumstances it is imperative that the medium for higher studies must be the English language, at least for some time to come. As long as our Vernaculars do not possess a decent collection of Scientific and Industrial works the highest truths of Science and the valuable treasures of Art cannot but be communicated through the instrumentality of the English language. It is, however, my earnest desire that this deplorable state of our Vernaculars

may soon come to an end and that we shall be able to conduct our own National universities equipped with a native Professorial staff and furnished with a rich library of Scientific works compiled in Vernacular and laboratories and workshops fitted by our indigenous native skill.

THE PROFESSIONS.

I shall now try to enumerate the classes of students for whom this University is contemplated; in other words, the professions that will find their place therein. The Bombay University has made provision for the learned professions of the Lawyer, the Doctor, the Statesman, the Political Economist, the Pure Mathematician, the Philosopher, the Historian, the Theoretical scientists and consequently these professions should be omitted from our list. All remaining professions may be grouped together under the head of non-learned (not meaning by that term that these professions do not require any learning but signifying merely that they are not popularly considered among the ancient learned professions) or modern or technical Professions, which are appropriately classified as follows:—

The Agriculturist

The Miner

The Metallurgist

The Civil Engineer

The Architect

The Mechanical Engineer

The Machinist

The Manufacturer .

. The Merchant

The Practical Chemist

The Surveyor

The Teacher or Professor.

The above list includes almost all the Modern Professions except the Naval ones, which I purposely omitted, as our State has not much to do directly with maritime pursuits.

At first it might seem almost impossible to provide for all these dozen professions in one institution, but the solution of this problem is not so difficult as one might imagine. These dozen professions do not require so many separate establishments and altogether different courses of instruction. For most of these professions the preliminary courses of auxiliary science would be alike. For instance, all those who have to deal with inorganic matter may learn its laws and properties together in one lecture-theatre and may work in the same Physical cabinet; while all those who have to deal with organic matter may study Vegetable and Animal life in the same room, in the same Museum, in the same Botanical garden and in the same Zoological menagerie.

FACULTIES.

To provide for the instruction of all these multifarious professions the University shall have to be divided into the following faculties.

- I. The Faculty of Chemical Technology.
- II. The Faculty of Agriculture and Forestry.
- III. The Faculty of Mechanical Technology.
- IV. The Faculty of Civil Construction.
 - V. The Faculty of Mining and Metallurgy.
- VI. The Faculty of Commerce.

THE PROGRAMME OF COURSES OF INSTRUCTION.

I shall now proceed to lay down a syllabus of subjects of instruction for these several Faculties. A detailed curriculum taken from Owen's College prescribing courses of studies for each year is given for the faculty of Chemical Technology while I have rested satisfied with the enumeration of subjects for the other Faculties after the model of the curriculum of the Zurich Polytechnic University.

I.—THE FACULTY OF CHEMICAL TECHNOLOGY.

First year.

Mathematics .-

Geometry, Euclid I, III and VI, propositions 1, 19 and 38. Algebra.—

As far as Progressions.

Experimental General Physics.—

Properties of Bodies; principal propositions in Statics, Kinetics and Hydrostatics.

Systematic Chemistry.-

Laws of Chemical combination, description of Physical and Chemical properties, and the mode of preparation of the non-metallic elements and of their compounds.

Geology.-

Stratigraphical Geology. The physical structure, classification and history of the Rocks.

Analytical and Practical Chemistry.-

The methods and practice of Qualitative Chemical analysis.

Geometrical and Mechanical Drawing.—

Second year.

Experimental Physics .-

The chief phenomena of sound, heat, light, electricity and magnetism.

Systematic Chemistry.-

Chemistry of the metals and of their most important compounds. Elements of organic Chemistry giving the compositions and relations of the best defined groups of organic bodies and the laws regulating their formation.

Analytical and practical Chemistry—

Laboratory course, quantitative chemical analysis, volumetric analysis.

Technological Chemistry lectures-

Sulphuric acid and soda manufactures, bleaching powders potassium chlorate.

Mineralogy: introduction to the study of-

the Chemical properties of minerals, classification of minerals, descriptive mineralogy.

Geometrical and mechanical drawing.

Third year,

Systematic Chemistry-

Organic chemistry, chemistry of the carbon compounds, history of the old and new theories, and of the most recent important discoveries in organic chemistry, &c.

Chemical philosophy.—

Sketch of the History of chemistry, development of modern chemistry, chemical laws and theories, relation of chemistry to physics.

Analytical and practical Chemistry .-

Laboratory course, water analysis, organic analysis, vapour densities, gas analysis, coal-gas, photometry; the preparation and analysis of various pure chemical substances or series of these; the extraction of various pure chemical substances from certain crude commercial products, their identification and analysis.

Technological chemistry lectures-

Destructive distillation of wood and products derived, destructive distillation of coal, distillation of coal tar, and separation of the crude tar products. Ammonia and ammonium salts from gas liquor.

Visits to Chemical Works.

Physical Laboratory-

- (1) Instruction in performance of the experiments seen in the lecture-room; and
- (2) In the use of the instruments, of precision in the physical laboratory.

Practical Mineralogy-

Practical determination of minerals, by their crystalline form, measurement of the interfacial angles of their

crystals with the hand, goniometer or reflecting gonio-meter, and their re-actions with the blow-pipe and re-agents.

Technological Mineralogy.-

Treatment of the minerals used in the arts and manufactures (especially those treated in the foregoing courses of technological chemistry), with regard to occurrence, recognition, composition, and properties.

Mechanical drawing .-

Fourth year.

Orgranic Chemistry Lectures.—

Technological Chemistry Lectures .-

Manufacture of Glass and Pottery, manufacture of pure coal tar products, of the commercially useful intermediate derivatives and of the coal tar Dyes, colouring matters, &ca-Visits to Works.

Analytical and Practical Chemistry, Preparation or extraction of pure Chemical substances with their analysis.

Original investigation and Re-search. The solution of various problems arising in the processes of the Chemical industries.

As an example of one branch of study may be specified :-

For Calico-Printers, Dyers and Colour manufacturers.

The analysis and valuation of the entire series of Printer's and Dyer's Chemicals.

The Qualitative determination and detection of colouring matters, Technical determination of the tin clorial value of alizarins, the preparation of pure coal tar products, and coal tar colours and other derivatives.

Chemistry of Colouring matters.

Dyeing and Calico Printing.

Mechanical Drawing.

II.—THE FACULTY OF AGRICULTURE AND FORESTRY

Pure Science.

Mathematics.
Physics.
Chemistry.
Natural History.
Geology.

Applied Science.

Anatomy of Plants. Physiology of Plants. Anatomy of Animals. Physiology of Animals. Geology of soils. Chemistry of soils. Chemistry of manures. Chemistry of Food. Veterinary medicine and Surgery. Surveying, Levelling, Plan-drawing and Drawing. Practical Mechanics. Principles of steam Engines. Agricultural Machinery and Implements. Nature and influence of climates. Buildings, Roads, Gates and Fences. Training Fruit Trees and Timber.

Practical Work.

In the Mechanical Work-shop.
In the Hospital for Animals.
In the Farm.
In the Chemical Laboratory.
In the Physical Laboratory.
In the Drawing Office.
In the Museum of Natural History.
In the Museum of Geology.

· III.-THE FACULTY OF MECHANICAL TECHNOLOGY

Pure Science.

Higher Cometry.

- ., Algebra.
- " Arithmetic.
- " Statics.
- ., Dynamics.
- , Energetics.
- " Chemistry.
- " Metallurgy.

Applied Science.

Descriptive Geometry Constructive Geometry Geometric Movements. Sources of Materials. Properties of Materials. Strength of Materials. Elements of Machines. Structural Mechanics. Machinery and Tools. Engines and Prime Movers. Economics of Work. Endurance of Machinery. Machine shops and buildings. Mechanical Manufactures. Political Economy. Workshop Economy. Principles of Designs,

Practical Work.

In the Drawing Office.

In the collection of Machines.

In the collection of machine materials.

In the collection of raw materials of manufacture.

In the collection of engines, &ca.
In mechanical experience.
In the factory.
Round the tour of Indian manufacturies.
In foreign travel.

IV.—THE FACULTY OF CIVIL CONSTRUCTION (ENGINEERING DIVISION.)

Pure Science.

Higher Geometry, Algebra and Arithmetic. Statics and dynamics.
Energetics.
Hydrology.
Chemistry.
Geology.
Crystallogy.

Applied Science.

Engines and prime movers. Theory of Vehicles and locomotive machines. Chemistry of building materials. Geology of stones and cements. Mineralogy and metallurgy. Stability of foundations. Building combinations of materials. Sources of materials of construction. Theory of bridges, roofs and tunnels. Constructive Geometry. Perspective Geometry. Geometric movements. Strength of materials. Machines and tools. Theory of rivers, tides and waves. Theory of roads, rail-roads and canals. Principles of architectural designs. Economics of construction.

Endurance of Structures, Engines, machines and implements.

Practical Work.

In the Drawing office.
In the collection of engineering models.
In the collection of building materials.
In the collection of machines.
In the Laboratory of strength of materials.
In the Chemical Laboratory.
In the Engineering experiment,
In the Factory.
On the Works.
In Foreign Travel.

(THE ARCHITECTURAL DIVISION.)

Pure Science.

Higher Geometry.

Laws of Number and Proportion.

Statics.

Psychology.

Asthetics.

Physics.

Chemistry.

Animal Physiology.

Botanic Organography.

Geology.

Art History.

Applied Science.

Descriptive Geometry.
Geometry of Vision.
Constructive Geometry.
Graphic Geometry and Surveying.
History of Building materials.
Strength of Materials.

Chemistry of building materials. Geology of Stones and Cements. Mineralogy. Stability of foundations to structures. Theory of arches and roofs. Forms of Beauty. Forms of Strength. Proportions of mass. Linear Decoration. Surface Decoration. Solid Decoration. Building Processes, Tools and Machinery. Building Economy. Building Endurance. Domestic Health. Domestic Economy. Domestic Comfort. Laws of sound and hearing in building. Laws of climate and weather. On use, purpose, and fitness. Principles of Design. Laws of property of building. Landscape Design.

Practical Work.

In the Drawing Office.
In School of Design.
In Modelling School.
In Mechanical Experiment.
In the Museum of ancient Models.
In the Museum of Modern Architecture.
In the collection of Building Materials.
In the collection of Decorations and Art workmanship In an Office of Works.
On the Works.
In Foreign Travel.

V.—THE FACULTY OF MINNING AND METALLUBGY (MINNING DIVISION.)

Pure Science.

Mathematics.

Physics.

Chemistry.

Geology.

Political Economy.

Applied Science.

Descriptive science.

Trigonometrical Surveying.

. Mineralogical Drawing.

Distribution of minerals.

Practical Mechanics.

Elements of Machinery.

Steam Engines and Boilers ventilation

Drawing.

Physiology and Chemistry of life.

Practical Work.

In the Chemical Laboratory

In the Physical Laboratory

In the Drawing Office.

In the Museum of Geology.

In the Mine.

In Foreign mines. .

(THE METALLURGICAL DIVISION.)

Pure Science.

Mathematics.

Physics.

Chemistry.

Geology.

Applied Science.

Swelting and refining.

Practical Mechanics.
Strength of Materials.
Descriptive Geometry.
Mineralogical Drawing.
Combustion and ventilation.
Elements of Machinery.
Steam Engines and Boilers.
Statics of Buildings.
Nature of Machines and Tools.
Hydrolic Machinery.
Electro-Magnetic Metallurgy.

Practical Work.

In the Chemical Laboratory. In the Physical Laboratory. In the Drawing Office. In the Museum of Geology. In the Metal Manufactory. In foreign travel.

VI.—THE FACULTY OF COMMERCE.

Pure Science.

Geography.
Natural History.
Ethnology.
Political Economy.
Doctrine of Probabilities.
History.
Languages.
Ethics.
Law.

Applied Science.

Construction and outfit of ships. Docks and Warehouses. Physical Geography. Political Geography. Geography of Plants.
Geography of Animals.
Geography of Minerals.
Weights and Measures of Nations.
Moneys of Nations.
Statistics and Wealth of Nations.
Laws of Value.
Laws of Insurance.
Laws of Navigation.
Principles of exchange.
Theories of price.
Interest and Banking.
Laws of Commerce and shipping.

Practical Work.

In Natural History Collections.
In Collection of Raw Materials.
In counting-house and Warehouse.
In Foreign Travel.

FOREIGN TRAVEL.

Foreign travel would be found to be one of the practical subjects set down for our Polytechnic University. What I intend is that a resort to foreign countries should not be necessary so far as School or University education is concerned. A good Polytechnic Institute worked here in the way I have proposed would, I am convinced, impart as much theoretical and practical knowledge as can be picked up in any of the foreign Scientific and Technical colleges, and it is only the select students who have learnt all that can be taught in this country, whom I reserve for being sent to travel abroad to see the working of the large factories and extensive workshops, not to be found except in Europe, and America. I expect that the adoption of this proposal will achieve better results than the sending of raw youths to pick up their entire education in Europe, and will also be more economical.

PROFESSORIAL STAFF FOR THE UNIVERSITY.

GENERAL PROFESSORSHIPS.

	Rupees from	
<u></u>	80	d to-p.m.
Professor of Mathematical sciences	500	to 1000
Professor of Physical sciences	500	,, 1000
Professor of Cosmological sciences	500	, 1000
Professor of Biological sciences	500	,, 1000
Professor of Literature .	500	, 1000
Professor of History and Philosophy	 500	**

SPECIAL TECHNICAL PROFESSORSHIPS.

			pees from
		an	d to-p.m.
Professor of Mechanical Technology	*****	5 00	to 1000
Professor of Chemical Technology		500	,, 1000
Professor of Minning and Metallurgy	*****	500	,, 1000
Professor of Commerce	*****	500	,, 1000
Professor of Agriculture	*****		,, 1000
Professor of Engineering and Architecture	11752	500	,, 1000

In addition to the above mentioned Professors, Lecturers, Demonstrators and Superintendents, in all about one dozen more, on an average salary of from Rs. 200 to 500 will be required.

Here the question will naturally arise where we shall seek all these Professors. It is almost impossible to expect that many natives of India can be found to worthily fill all the higher chairs, but all the subordinate chairs together with some of the higher chairs can very well be occupied by distinguished Graluates of our Indian Universities. For the most of the dozen higher chairs, European scientists must be invited to conduct them for one generation at any rate. Among the Europeans very few best qualified Englishmen would come forward to take up these chairs as the salary proposed will not be a sufficient inducement to them to leave their Homes. The Continental standard of remunera-

tion is much lower than that of England, and so we shall be able to secure the services of superior scientists of Germany and other countries on these salaries. I shall, moreover, like to prefer Germans to Englishmen as the Professors of our University on several other grounds among which I may mention only one. The Germans and the Swiss have got the best Technical universities in the world established many years ago, and consequently they have a long and thorough experience of conducting such Technical institutions; while the English people have only lately made a substantial beginning in the matter of Technical education. England has even now got no Technical institutions which can be compared with the Zurich university. It is a well known fact that the students from all countries including England desirous of having systematic technical education flock to the German Universities and many German technical men have been employed by English capiralists to conduct large factories in England itself. Further I have heard that at present in Germany owing to its elaborate and fully developed systems of technical education, the supply of technical men has far exceeded the 'demand. Thus the Continental savants would best suit our University.

If our Technical University is to be successful, its Professorial staff must be of the highest kind available. Our Professors should be esteemed in repute equal to, if not greater than that of other responsible officers of the State and so they must have an income as large as that of a Suba or a Judge.

MATERIAL MECHANISM OF INSTRUCTION.

Museum of Geometry.—Geometry is looked upon as merely an abstract science in a literary University, but in a technical University it should be treated in quite a different manner. All the Geometrical forms should be presented to the view of the student in concrete form. Therefore this Museum should be furnished with "classified progressive illustrations of all the most beautiful curious, and useful forms which human genius has created or which the geometery of Nature has

embodied in the works of Nature or enveloped in its laws." It should also contain all the varieties of solid forms, such as models of spherical geometry and their developments.

The Hall of Mechanics.—This should "contain a systematic development of every kind of tool the human mind has been able to invent or that the human hand is able to wield." It must next contain all the varieties of steam-engines, water-engines, fire-engines, gas-engines, magnetic-engines, and electric-engines, and also models, on a small scale of various departments of manufacturing machinery such as the oil-mill, spinning and weaving-mill, paper-mill, &c.

The Hall of Physical Science.—It should contain apparatus to demonstrate all the principle phenomena of Nature, including those of heat, light, sound, electricity, and magnetism as well as physical geography and meteorology.

The Hall of Chemistry.—In a technical University, none should be on a grander scale; for none can be more useful than this Hall of "The Modern Magician, the all-powerful Alchemist."

It should be furnished with all the appliances requisite for the principal chemical industries, e. g., Sulphuric Acid Manufacture, Alkali Trade, Dyoing, Bleaching and Calico-printing, &c.

Museum of Geology:—This should contain all varieties of crystals, shells and other specimens of Rocks as well as Paleontological series.

Museum of Raw Muterials:—This should contain all specimens of Raw materials of vegetable, animal and mineral sources.

Botanical Gardens:—The site of our University should be as near to the Public Park as convenient so that all the living specimens of regetable life may be familiarized to the eyes of the students. The University compound should also enclose a systematically organized Botanical Garden.

Meteorological Observatory:—A separate building should be erected at a convenient site in the garden of the University.

Zoological Collection:—This should be furnished with every species of animals available in this part of the country.

Anatomical Museum:—This should contain all prepared specimens of animal as well as human structure.

A Museum of Fine Art:—In addition to the above Museums and Halls, actual workshops and manufacturing Laboratories should be attached to the University. In a country like England teeming with manufactories and Mills, such workshops and Laboratories for the "Mimicry of work" would not be necessary but it would be indispensable in a country like India, where only a few industrial Establishments exist, to attach workshops and Laboratories for carrying on Industrial work on a small scale. Thus the following institutions for practical work are proposed to be established in connection with the University.

- 1 A Mechanical Workshop.
- 2 A Chemical Laboratory for Analytical work.
- 3 A Chemical Laboratory for Manufacturing Experiments.
- 4 A Drawing Office.

Lastly, I propose a Library to be established in connection with the University whose scope should be extensive and in due proportion to the development of the University and the ultimate aim should be to form a complete collection of all the important English, American, German and French works on Pure and Applied sciences.

DIPLOMAS.

It is desirable that our University should grant diplomas for completed studies, which should be of two kinds, the Associate-ship and the Fellow-ship. The Associate-ship should be awarded to students who shall have gone through the complete course of instruction and have satisfactorily passed the examinations. The examinations will be held by College Professors at the end of each year, the last of which would be essentially practical in character. The fellowship would be conferred upon persons whe, having obtained the Associateship, and spent at least three years in actual practice, should produce evidence of having done some original and valuable re-search work, or of having otherwise contributed to the advancement of the industry in which they are engaged by their work here or abroad.

THE BUILDING.

As for the building required for this Institution, I beg to propose that in the beginning, the present College building is the most suitable in all ways. The High-school may be located in some one of the unoccupied Palaces which could with a little cost and pains be converted to the uses of that school.

By the adoption of this measure great present outlay might be spared and immediate accommodation can be given to our University. In course of time, however, a new building may be built, the design for which should be taken from that of the Zurich University or the City and Guilds of London Institution.

GOVERNMENT AND WORKING.

The last subject I refer to is that of supplying the personal organization of the complicated system I have proposed. The duty of working this system should be left to a minister of education assisted by a Council of seven savants representing different branches of learning. The selection of the officer whom I term the minister of Education can never be too careful. He must be one who has himself received first Class education, and combines in himself administrative ability, zeal and tact. His business will be to study the educational needs of

the various classes of the population, devise schemes to satisfy them, and superintend the working of such schemes as may be adopted. The seven gentlemen intended to assist him should represent the Mechanical professions, the Fine Arts, Manufacture, Commerce, Agriculture, Literature and Philosophy.

This educational personnel is to act under the orders of the final authority, viz., His Highness the Maharaja Saheb, with whom as Chancellor of the University I have proposed will rest the granting of the diplomas.

FINANCE.

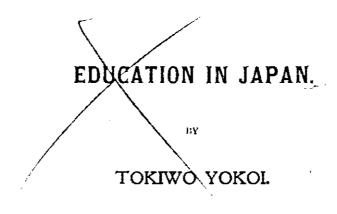
The ways and means of carrying out the above scheme are the most important matter, in the details of which I have not gone. I am prepared to supply them at any time I am called on to do so. I have not given them here because I felt it would be a waste of energy to note them before it is determined what portions of the Scheme are considered worth adoption. I might, however, mention generally that a reorganization on the above basis may not cost the State more than three times the present annual expenditure when the system is prefectly developed.

CONCLUSION.

I have given but a bare sketch of my ideas on the subject of National education. The vastness of the field traversed over made it impossible for me to have done anything, more in a short Note like the present. I am not so vain as to imagine that there will not be several deficiencies or errors in my views as above expressed. My object is to press on the attention of His Highness the Maharaja Saheb the extreme necessity of overhauling and reorganizing the present system of education. If I succeed in exciting thought and attention, no one will be more ready to accept necessary modification than I. I beg leave to conclude with a prayer and hope that His

Highness will realize that of all the blessings which an enlightened Prince like His Highness can bestow on his loving and devoted subjects none can be so lasting and really valuable as placing within their reach the means of practical education worthy of the name.

T. K. GAJJAR.



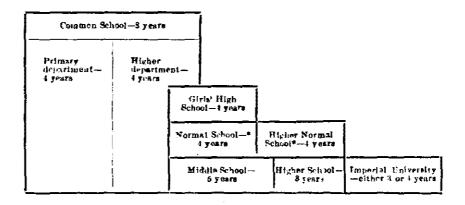
Thirty years ago, the Japanese people were practically where the Chinese are to-day; they were immersed in a sea of ignorance. In matters of art and manufacture, they went by a mere routine of practical experience, with no kind of scientific knowledge whatever. In religion and social usages, they were slaves of superstition, being in constant terror of offending the spirits of land, water and fire, of wood and stone. In politics, the narrowest particularism ruled the day, the patriotism and intersts of a Japanese being confined within the narrow limits of one of three hundred principalities which split up the empire; a rudimentary sort of national sentiment being only noticeable in the universal hatred of "foreign barbarians." To be sure, there was an educated class-the Samurai-who had the monopoly of political and military privileges, who, numbering perhaps one fifteenth of the population, were in a way highly cultured, remarkably free from popular superstitions and leading lives characterized by uprightness and devotion to duty. Yet the culture of these men was as one-sided as that of a Chinese mandarin; and in matters of science and the out-side world they were as ignorant as the most ignorant of their countrymen. That out of this sea of ignorance there arose a new Japan, civilized, free and strong, was due more to the introduction of a modern system of education than to any other one thing.

There were, of course, other potent factors which contributed toward the evolution of modern Japan. Among the more important of these may be mentioned: the overthrow of feudalism, with its accompanying class privileges; the introduction of a modern code of laws and a judical system, giving equal protection to all classes and to all legitimate interests of the people; the reform of the administration, of the finances and of taxation, as well as the introduction of the mordern banking system; and finally, the inauguration of a representative form of government. It is easy to see, however, that all these reforms, wise and far-reaching as they were, would have proved to be but mere paper and ink reforms, if it had not been for the rapid successes of a newly introduced system of education.

The mordern system of education in Japan is largely the gift of America. In the middle of the seventies, when the system was first introuduced, through the efforts of Count Oki, educational minister in those days, it was chiefly American advisors and men inspired with American ideas about education who shaped the policy of the government. Mr. Kido, one of the three leading statemen of the Restoration epoch, who, as member of the famous Japanese Embassy of 1872-1873, paid special attention to educational matters, seems to have been deeply impressed by the state of things he saw in the United States. Again, it was Mr. Arinori Mori, at one time a student in the United States and afterwards the Japanese Minister at Washington, who in those early days did much to inspire and shape, though indirectly, the educational policy of the government, and when he was finally appointed in 1885 chief of the educational department, after his mind had been further enriched by a thorough study of educational matters in England and the continent of Europe, be entirely reorganized the system then in existence and gave it a new life and energy.

The educational system as it now exists is essentially similar to the system in vogue in America and Europe. It begeins with the common school course, comprising a primary department covering four years, to which children at the age of six are admitted, and a secondary or higher grade covering another four years. Above this there is the middle school course of five years for boys and the high school course of four years for girls, to both which those who have been two years in the higher department of the

common school are admitted. Above the middle school stand the higher schools, of which there are six in the country, and which provide three years' preparatory courses for the Imperial University, mostly in languages and mathematics, as well as, in the case of some of them, four years special training in medicine, law or engineering, instruction being given in the vernacular. Only the graduates of the middle school are admitted to the higher school, and through competitive examination. Lastly, at the head of all stand the two Imperial Universities of Tokyo and Kyoto-the former consisting of the colleges of law, medicine, engineering, literature, science and agriculture; the latter of the colleges of science and engineering, medicine, law and literature. provision made for the post-graduate studies, called Dai-gaku-into which only graduates of superior scholarship are eligible. The system as tabulated stands as follows:-



The following are the educational statistics in brief outline for 1898:—

The normal school consists of male and female departments and trains teachers for common schools, while the higher normal school trains teachers for normal schools, maddle schools and girls' high schools. There are various other schools for special training or liberal education, some maintained by the government and others by private corporations, which stand outside of the national system as above sketched, but which form a no inclusive factor in the education of the country.

Institutions	NUMBER	TEACHING STTAF	STUDENTS AND FUPILS	GRADU-
Common Schools	26,824 72 Government 26,368 Public 451 Private	'3,56fi 73 665 mates 9,901 females	4,062,418 {2,532,277 males {1,430,141 females	593,381
Apprentke Schools	1 Government 17 Public 6 Private	135	1,525	185
Prim ry Industrial Schools.	118 109 Public 4 Private	242	6,975	674
Blind and Dun b Asylums .	7 [1 Government 1 Public 5 Private	87	291	23
Normal Schools	47 Public	769	10,350	4,916
Uigher Formal Schols	Groernmens	108	781	146
Middle School+	169 1 Government 133 Public 80 Private	2,003	61,632	3,967
Girls Higher Schools . , .	84 1 Government 25 Public 8 Private	406	8,5%	962
Bigher Schools	6 Government	851	4,664	970
Imperial Valvarsities	2 Government	980	2,569	477
Special Schools	41 6 Public 85 Private	coe	11,142	1,637
Fechs.leat Schools	91 6 Government 71 Public 14 Private	927	18,280	2,212
Other relimin, entaide of the classes above named	1,061 { 17 Public 1,044 Private	2,998	63,178	12,008
Total for 1898	28,421	* 92,963	4,247,341	626,148
Fotal for 1897	28,462	87,855	4,168,717	å73,79 6
Cotal for 1898	25,404	84,014	4,036,978	530,207
Cotal for 1805	28,228	80,842	8,802,:83	488,304
Fotal for 1894	25,687	69,344	8,622,811	488,299

It is encouraging to note that the attendance at common schools is steadily increasing. In 1898 the number of children of school age (six to fourteen years) who were enrolled in the common schools or who had graduated from the primary departments were 4,910,380, while the number of those who either left the primary

departments before graduating or who were never enrolled was found to be 2,215,585. The percentage of school attendance during 1898 may be, therefore, put down as 63.91; while the increase may be seen by comparing the figures for 1898, with those for 1897 and 1896, i. e., 66.65 and 64.22, respectively.

I believe it is not far from the truth that, since 1876, there have passed through our common schools some seventeen millions of children, of whom 30 per cent, were girls. It is no wonder, therefore, that among the army recruits who are drafted annually by conscription from all classes of people, the number of illiterates is rapidly decrasing, as may be seen from the following figures.

Statistics for army recruits for 1897 and 1898.

Year	Graduites from middle echoli	Gradustes from higher department of cummon achoul	Graduates from primary department of common school	Illitere*es	Percentage of illiterates
1897	26	6,513	19,630	6,463	.28
1898	8*6	8,117	23,772	5,436	.14

A marked increase in the demand for middle school education is another encouraging feature that should be noted. While in 1802 the number of middle schools throughout the country was but 62 and the studen's attending them 16,189, both the schools and attendance have since increased by leaps and bounds, until in 1807 there were 156 middle schools and 52,442 students in attendance; and the graduates from those schools have increased from 702 in 1892 to 2,458 in 1897. At the same time it was inevitable that the demand for the education of the higher school should increase also. Of course, not all the middle school graduates wish to enter the higher schools. Many of them give up student life altogether. Many others immediately enter various professional schools, such as business, law, medical, polytechnic, agricultural or the normal schools. But an increasingly larger number aspire for university education, and these all ask for admittance into higher schools. One of the most pressing questions with the educational authorities is how to make provision to meet the increased demand for the higher school education. There were but six higher schools in 1898 and they could accommodate less than half the number asking for admission. The remedy for this painful state of things seems to lie either in greatly increasing the capacities of the present six schools or in establishing some new ones. The latter seems to be the plan in favour with the educational authorities and the public at large.

But the matter is not so simple as it seems. There is an ulterior question that must be decided before the latter plan is adopted. . The question is this: Is the higher school a permanent institution or a temporary one? Now the courses of the most higher schools are strictly preparatory to the University, and are mainly devoted to modern languages and mathematics. strongly urged by some that the higher school, as preparatory to the university and as a distinct institution, need not be a permanenent thing; that by improving the teaching and the grade of studies in the middle school, and, perhaps, by adding one or two years to that school, the preparatory course in the higher school may be dispensed with, so that the young men may be made to enter the university at once from the middle school. a reform is accomplished, these reformers contend, the present higher schools may be gradually turned into universities or colleges, which would be greatly to the advatage of the country, since the present two universities will hardly be sufficient to meet the educationl requirement twenty years hence. It seems, therefore pending the decision of this question, a much wiser policy for the government to adopt the plan of increasing the capacities of the existing higher schools instead of establishing new ones.

University education has been confined until three years ago to the Imperial University of Tokyo, but since then the Imperial University of Kyoto has been founded. The two universities will be found sufficient, provided their capacities are expanded, to meet the requirement of the nation for some years to come. Certain of the political parties have taken up the plan of founding two new universities—one in the northeast and the other in the southwest (Kiu-shu Is.) and considerable pressure is being brought upon the government to adopt this plan. I doubt very much, however, whether the finances of the country will allow the carrying out of any such bold scheme as the one mentioned; for the government is now confronted with the more pressing question of elementary education.

The provisions for common school education are in a very unsatisfactory condition. Not only is the percentage of school attendance not as high as one would wish it to be, but the personnel of teachers and the equipment of the schools are far from being satisfactory. If the principle of compulsory education is to be thoroughly carried out, it would be necessary first of all to dispense with the tuition, of which the amount received for 1898 was 4,542,382 yen—a no inconsiderable part of the income of the common schools. With the heavy school rates which the municipalities and village communes are now paying, it will be impossible to induce them to pay enough more to make the common school education free. Hence there does not seem to be any other solution but for the central government to increase its annual subsidy to cover that amount. But even more pressing than this is the question of the personnel of teachers. Of 79,299 common school teachers of the country only about one half are properly qualified, the rest being teachers of doubtful qualification whom the schools are compelled to employ. The central government as well as prefectural governments have been giving, for several years past, a most serious attention to this question; but the much-needed teachers are not forthcoming and the prospect is not at all encouraging. There is no question that one essential condition is better pay. The average monthly pay of the properly qualified teacher is ten yen (or five dollars) and of the assistant teachers seven yen. The principal of the common school gets on an average probably twenty yen. Now these sums are miserably inadequate even in Japan where the prices are proverbially low. An ordinary coolie would get as much as the common school teacher, while skilled artisans, such as carpenters or masons would get as much as the principal of a common school. Ten or fifteen years ago when prices were one-half what they are now, the school teachers were tolerably well off. Besides, in those days there were a large number of needy Samurai, to whom these small salaries were no little attraction. But a great change has since come over the country, not only economically, but in the sentiment of the people. Most young men of the Samurai class, who would have contentedly filled the positions of common school teachers, are now rushing into business, where they get salaries double what they would get by teaching, with the possibility of becoming wealthy. It seems,

therefore, that in order to make the profession of a common school teacher more attractive, the first necessary condition would be to raise the pay, and that by the only available method of state aid.

In fact a beginning was made in this direction some years ago, by the enactment of a law for increasing the salaries of teachers as reward for meritorious service. According to that law, a teacher who has served in one school five consecutive years gets his salary increased fifteen per cent., one who has served ten years twenty-five per cent., one who has served fifteen years thirty-five per cent.,—the gross amount thus increased being paid from the state treasury. In last year's Diet (1899) it was voted to set apart 10,000,000 yen out of the Chinese indemnity, as a permanent fund,—the annual income from which is to be used partly in aid of common schools in general and partly in making loans to the needy communes toward assisting in putting up suitable school houses. But a much larger appropriation from the state treasury will have to be made in order to secure the services of a sufficient number of competent teachers.

Much good will doubtless result, economically and otherwise, from the employment of a larger proportion of women teachers. At present there are about 17,362 women engaged in teaching in the common schools—a little over two-tenths of the entire number of teachers. There is no reason why the ratio between women and men may not be reversed.

A question of vital importance is the attitude of the government toward private schools. According to statistics there were, in 1808, 454 common schools, 6 apprentice schools, 4 manual training schools, 5 blind and deaf asylums, 30 middle schools, 8 girls' high schools, 35 special schools; 14 technical schools and 1044 other schools of various grades, all maintained by private individuals or corporations. Now these schools are rendering a most useful service by filling the gap created through the inadequacy of provisions made by the state and the public. There is no question that some of the more influential of these schools, especially those engaged in the higher education, have hitherto been looked upon with little favor by government authorities. These private institutions refused to take official models and be tied to rules and systems prescribed by the government, but by adopting different methods seemed to claim that they could reach the aim set forth in the official programme more easily and more quickly. It is needless to say that this was not liked by officials addicted to the routine duties of the bureaucratic service. There were other features in these schools which were offensive to officials. Some of them had close connections with Christian churches, others were animated by a freer and more independent spirit than was found in government schools, while still others had political aims antagonistic to the parties in power. In one way and another, therefore, hindrances and impediments were placed in the way of these schools. The history of some of them is a series of struggles against official oppression. Yet a change is coming over the entire situation. On the one hand, it is becoming more and more apparent that it would be beyond the present financial means of the government to make at once a complete and sufficient provision for the educational requirement of the nation. On the other hand, the marked success of these private institutions in giving a much needed liberal education, as well as training in special subjects, such as law, medicine, etc., has come to be recognized even by the government officials. Moreover the democratic tendencies engendered by the successful working of the Imperial Diet have done much to break down the middle wall of partition between the officialdom and the country at large. The time is, I think, fast approaching when private schools will rank with state or public institutions and be officially protected and encouraged.

In commercial and technical education, the policy of the government-pursued with unflagging zeal for more than ten yearsis now being crowned with great success. Much credit is due to Viscount Inouye, the minister of education in 1893-94, for laying the foundations of this most important branch of national education. The numerous schools of this description found all over the country, in increasingly larger number, are yearly sending out trained young men by the hundreds to fill places of responsibility as clerks, managers, mechanics, overseers. It is to these able and ambitious young men that the country must look to successfully accomplish its destined industrial and commercial development in the near future. When it is remembered that within less than a generation artisans and business men constituted a despised class. regarded as even below farmers, and that mathematics and useful arts were regarded as unworthy of the attention of the higher classes, their recent rush into business and industrial pursuits will

show how great a revolution has taken place in sentiment and social conditions. In view of these facts, I believe it is not unreasonable to expect that the moral as well as the technical defects of Japanese commercial and industrial methods, now so justly complained of, will come to be remedied before many years are past. And when such a stage is reached Japan will have completed one of the last necessary changes toward her complete transformation into a first-rate modern nation.

The coming into operation of the new, revised treaties with western nations, through which the extra-territorial jurisdiction of foreign judicial courts—a yoke of bondage, however unavoidable, thoroughly rebelled against by the Japanese-has been abolished. is producing a broader and more sympathetic spirit among the people toward things and persons of the outside world, than was the case a number of years back. The effect is seen, for instance, in the importance that is being given to the teaching of modern languages in the schools. Last year the government opened a school of foreign languages, where eight modern languages are now being taught, including the Chinese and the Korean. Doubtless steps will also be taken toward making the teaching of English in the middle schools more effective, so that the English language -this being the only foreign language taught in the middle schools, except in the case of one or two-will be more and more the prevailing foreign languange in the country, contributing through its rich literature and world-knowledge to the enlightenment and enrichment of the life and thought of the people.

The ethical teaching in the schools remains still the most important unsolved problem with the educators of the country. The varions methods that have been tried during the past fifteen or more years, such as the use of Confucian classics or the worshiping of the letter of the Empero's rescript on morals, have all proved inadequate to solve the great problem with which the nation is confronted. The greatest difficulty in the way of its solution is probably caused by the presence of two factors which must be taken into consideration. These two factors are the relation of religion to education, and the bearing of the changed social conditions of country on the kind of ethics to be taught in the schools.

Secular education in its barest form is the system that has been in vogue; But it is a question, which, I believe, is now

beginning to engage the serious attention of many of our leading educational thinkers, whether education in order to be secular must necessarily be so completely detached from religion-or anti-religious—as has been the case hitherto. To Viscount Mori is attributed, whether rightly or wrongly I know not, the dictum which has ruled the educational world of Japan for years past, that the minds of pupils must be kept completely blank as far as religious ideas are concerned, until they attain to years of discretion. It is questionable, however, whether young minds can be kept entirely blank and free from religious bias for many years. Weeds grow and fill up gardens if useful plants are not cultivated. actual result of this policy seems to be that the gain in the form of freedom from bigory or superstition is counter-balanced by a lack of ethical ideals and intellectual dep'h among the educated class. Secularism in education, as emphasized by the Japanese authorities, seems to go hand in hand with shallowness and worldliness. When there is no sense of the eternal that maketh for righteousness, when no great and ennobling ideal pervades the thought, when martial glory and national splendor are all that call forth the ambition of the young men, who can expect great results from the teaching given in the schools? I am far from thinking that education in Japan should be given over entirely to Buddhist priests or Christian missionaries, or that endless religious disputations should be brought into the lecture room. I believe in secular education, in the sense of its being separated from sectarian religious systems or bodies. But secularism does not necessarily imply antireligion, or hostility toward some one form of religion.

It is a question worthy of careful consideration whether some essential elements common to various religions, perhaps in the form of philosophical teaching, may not be introduced with advantage in connection with ethical instruction in the schools, without prejudicing or favoring, at the same time, any one form of religion. Or another method might be possible. While keeping the schools maintained by the government or public entirely free from the introduction even of such philosophical teachings as above suggested, some liberty of religious teaching outside of school hours might not be left to the discretion of private schools, which in other respects would follow the government curriculum and receive all het corresponding privileges. If such a liberal attitude were

pursued, these private schools would increase in number and help to introduce a much needed higher ethical life into the school system.

The other factor to be considered is the changed social conditions of the country. It is needless to urge the importance of the historical method in the ethical training of the young. Not only do the acts and sayings of the heroes of history constitute the most important source of illustrations and reference for the ethical teacher, but the teaching of national history itself may be turned into a series of ethical lessons, especially in so far as public morals are concerned. It is, however, important to remember that there is a growth in history—in the history of the oriental nations as well as in that of the western—and that the social conditions prevailing now are different from those prevailing a century or less than a century ago. No ethical teacher can ignore the fact of such a growth or fail to understand the particular social conditions of his own time, without risking failure. It is much to be regretted that the ethical teachers in this country seem to fail to take sufficient note of the time they live in and of the points of difference between this and past age. Some of them at least teach and act as if they were living in the age of feudalism. time has gone forever when the relation of lord and retainer formed the supreme factor in a community, so that the one term loyalty was sufficient to express the tie that bound the entire social fabric together. The Japanese people are to-day and will continue to be one of the most patoriotic of peoples. Never in the past history of the country were the people so devotedly and unanimously loval to the Imperial house as they are to-day. But, on the other hand, all the multitudinous interests and motives that sway the people of an industrial epoch are asserting themselves here almost as much as in western lands.

There is need of a transformation in the ethical teaching of the country, corresponding to the transformation that is taking place in the social life and ideas. When, therefore, the ethical instruction furnished in the schools is cast in a mould suited only to feudal times, as is so often the case with us, it is not surprising that the effect of such teaching should be meagre. A great work, therefore, awaits the thoughtful teachers of this land: to formulate anew into a system of ethics fit for the guidance of the young, those truths which have already become the heritage of the nation, and to include also those other truths which need special emphasis and insistance, in view of the new order of things which has come to prevail.

It has been possible in this article to give but a very meagre idea of the results of twenty-five years work of education, as well as some of the serious problems that are waiting for solution. The work founded by Count Oki, reorganized by Viscount Mori, improved by Viscount Inouye, is now calling for some strong hand to bring it into close touch with the new order of things prevailing here as the results of an "industrial revolution." If a statesman like Marquis Saionji should become the minister of education, it may be that many of the crying abuses will be removed and some of the more important of the much needed reforms will be at last introduced into the national system of education in Japan.

VERNACULÁRS

AS

Media of Instruction

IN

Indian Schools and Colleges

BY

P. J. MEHTA, M. D.,

Barrister-at-Law .

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VERNACULARS

AS MEDIA OF INSTRUCTION IN INDIAN SCHOOLS AND COLLEGES.

By P. J. Mehta, M. D., Barrister-at-Law.

I

In a country, where the language of the schools and colleges, of the council chamber and the courts, of commerce and trade, of posts and telegraphs, and of daily intercourse between the rulers and the ruled, as well as of her better instructed men at congresses, conferences, and public meetings, is other than that of the people of the soil, as a rule, all avenues to the development of real manhood must necessarily remain closed even to the most deserving of its sons. We know from statistics, that although the number of schools and colleges, where almost all instruction is imparted through the medium of English, is a fairly large one in India, the number of men and women who have some knowledge of the English language—in many cases only a smattering of knowledge—is less than one per cent of the whole population. In the nature of things, it is not possible for a larger number of the population to be acquainted with even the A. B. C. of a foreign language. The province of new Bengal is supposed to be the most highly educated of the whole of India. It has a greater number of trained lawyers, doctors, scientists, journalists, professors, teachers &c. Some of them are able to hold their own against men whose mother-tongue is English. For instance. in science, the eminent savants of England, France and the United States lately declared that the investigations on the border-land between physics and physiology conducted by our renowned Professor J. C. Bose, had left Europe far behind India, and that they would now have to go to the latter country for further inspiration. Dr. Bose is reported to have received applications from distinguished Universities of Europe and America for the admission of foreign post-graduate scholars, to be trained in his laboratory in the new scientific methods that have been invented by him. It is quite likely that, before long, India will have a number of European scholars receiving instruction in science in his laboratory at Calentta through the medium of English. In other fields, also, a few Bongalees have made quite as great a mark as Professor Bose has done in physical science. Some of them have held and are holding some of the

most coveted and responsible posts in the Government of India, on account of their scholarship or statesmanship. Go to Calcutta, and you will find that her lawyers, doctors, and other professional men have stepped into positions, which were a few years ago occupied by Englishmen alone. Those amongst them, who are on the top of their profession, are occupying most enviable positions. Sir S. P. Sinha, who presided at the 1915 session of the Indian National Congress is the leader of the Calcutta Bar. Their journalists are able to turn out papers and periodicals in English, as if they were writing in their own tongue. Their speakers and orators deliver orations in English which very few Englishmen surpass. Their professors and teachers have as great command of the foreign tongue as those who are born and brought up to it. The Brahmo Samaj, a body consisting of some of the alumni of the Calcutta and English Universities, has its home in that province. Many members of that Samaj know the English language very much better than their mother-tongue, and use it even in religious sermons to a very large extent. Several of them have taken to English ways and habits, as if they were habituated to them from time immemorial. In a few families, the process of denationalization has been going on for more than two generations, and were it not for their skin, it would be very difficult to recognise them as Indians. Their habits and sympathies are so transformed, that it is difficult to say that they are India-born. Those members of the parliamentary committee, appointed to inquire into the affairs of the East India Company in 1813—when India was more than selfsupporting in the matter of manufactures -- who come from the manufacturing districts of England, invariably questioned the witnesses that appeared before them as to how European wares could be introduced in. Indian households. And the reply of the witnesses invariably was that that could be done by introducing western civilisation and opening out educational institutions where the pupils might be trained in European ideas of life and living. All the time they were simply harping upon one theme viz. how to anglicise Indians in the matter of dress and other household requirements. To quote an instance, when Warren Hastings, the first Governor General of Bengal, stated in his evidence before the above mentioned Committee, that he remembered a Catholic priest, who resided near Dacca, and had about him a large flock of men, whom he called Christians, that they were Christians only in name and dress, and that the priest was ignorant of the common language of the country, the members of the Committee, from the manufacturing districts. hearing the allusion about the dress of the converts, hurriedly inquired whether the clothes they were were of European manufacture, and Mr. Hastings replied that he had never seen them. In 1820 the Rev. Mr. Ward of Serampore, finding that sixty millions of people, living under the East India Company, required no article from the governing country

wrote the following letter to Mr. J. C. Villiers, a Minister of the British Government.

"At present the Hindus of the middle ranks, not to speak of the lower, want nothing which can be supplied from England; sixty millions of subjects requiring not one article from the Governing country. Improve their faculties, they will then learn in how many ways they may increase their rational enjoyments, their industry will nence be stimulated to procure them."

Modern educational institutions have done more for the opening out of the Indian market to European wares, than was anticipated by the ardent advocates of the commercial policy indicated in the above passages. The wants of the English-knowing Indians have increased out of all proportion to their earning capacity. Whether they are pleading in courts, or serving in Government offices—these are the principal occupations from which the majority of them eke out an income barely sufficient for their livelihood—they require all the paraphernalia of modern civilization, such as coats and trousers of European cut, ties and collars, hats and bocts and many other articles of daily wear. Almost all of them have now—a-days to be imported from Europe and the prophecy, made by the western commercialists of the day, has been more than realised.

Men of the above type generally swear by everything European. They are so thoroughly Europeanised, that they cannot bear to see anything Indian in Indians. They have hardly any faith in their own ancestral institutions. They dote upon European institutions. They want even to avoid the modern Indian schools, though based upon English models, because, in their opinion, they are much too Indian for them. They want them to be perfect models of English public schools. But as that would be a very large order for the whole of India, they prefer to have one such, at least, where they could give their boys such instruction as would make them English gentlemen. A public school has now been started, at their instance, under Government auspices, at Hastings House, Calcut'a. To make it sufficiently exclusive, the monthly charge for heard, I dging and tuition has been fixed at Rs. 110. When I visited the institution in November 19:5, the number of boys was only fourteen. It may have increased since, but it cannot be very much larger.

In England, there is a large number of such institutions, but there is a growing feeling there that, after all, the education imparted therein is far from what it should be, as the following extract from the Presidential speech, delivered by Professor Perry, at the Educational Section of the British Association, in 1915, on public school and college life, will show. He said:

"Every clever man, who has gone to a public school and to Oxford and Cambridge, worships the system which has taken from him his spiritual birth right, his individuatity, his common sense, his power to think for himself-yes and, I may say, his belief in himself. He has become too much like a sheep, ready to follow the bell-wether; he is a man who has greatly lost his soul."

"English people know the worthlessness of the public school system in the mental training of the average boy. This worthless system continues because, in some occult way, it seems to have a connection with something of real importance, public school form.....This form is essentially aristocratic: It is based on superiority of position, birth or caste. A man's place is fixed, his attitude to people of higher or lower rank is fixed. He needs no self-assertion, and he cannot become a "bounder," that is, a "cad"; but in Thackeray's sense, he is usually a snob, and in various directions, he may be a prig. By prig, I mean a man who cannot get outside convention, and so cannot exercise his own common sense. One defect is that public school form, when combined with poverty, cannot make much money by its own ability, and if it does not starve, it must join the valets or grooms. Its strength lies in convention and habit, and the belief that poor people are not men, but a lower kind of animal, who may be pitied, as we pity a suffering dog. Such pity can never raise the people or reform abuses."

Professor Perry believes that day-schools are a great advantage, because those studying therein can remain in touch with home life. He thinks that the boys, whose parents are too poor to send them to day-schools, are really better off than those who receive their education in public schools. He says:—"It is one of the great advantages of poverty, that the children go to day-schools, and they keep in touch with home life." In that speech he laid stress on the fact that character came from home life, and not from school life. His view was that the school-life was antagonistic to the formation of character, and that the best place to form it was by living in contact with fathers and sisters, relatives and friends.

better give more thought to the question, before adopting it whole heartedly. In our imitation of European thought and life, we scarcely follow upto-date ideas. One who has studied European history carefully, cannot have failed to see that the ideals amongst European nations change often from generation to generation. No idea remains stationary for a number of years. They believe that they are progressing, when, in fact, they are simply experimenting with life. This is particularly so in the matter of education. They do not go upon any fixed ideal for two generations together. The whole thing is a matter of expediency. If one nation finds that another nation has made some material progress in any line by the adoption of certain methods of education which may even militate against her own, she at once changes the old methods of instruction in her

schools, and adopts the new one of the other nation. The ideal changes as the circumstances change. Even ideas of spirituality and ethics change with a change in circumstances.

There was a time when public schools used to be rated very highly as educational institutions in England. Opinion on the subject is now divided. There are many, now-a-days, who believe that education divorced from home influences has a very detrimental effect upon character. They say that young people should not be weaned from home life, if the objective is to develop healthy character amongst them. Their opinion is that the present-day public school education does more harm than good in many cases, and that so far as the formation of character of the young people is concerned, no system of education can be trusted that is divorced from parental control and home influence.

While, in England, public school life is losing many of its old charms by enlarged experience of it, in India, we are getting quite enamoured of them. The public in India is generally out of touch with current notions on any one subject in Europe. It takes at least half a century, if not more, for any foreign thought of a healthy nature to reach the leaders of the people of India. By the time they are ready to introduce it in their country, it often happens that it is being looked at askance, or has, in many cases, been cast out as worn out or out-of-date in its country of origin. Once an innovation is introduced, it may well take fifty years before the mistake is found out. Such has been the case with regard to English as a medium of instruction in Indian schools and colleges. When this system was about to be introduced, there were many Indians of light and leading who welcomed it as a God-send. It was after nearly fifty years had elapsed, that the thinking part of the people woke up to its mischievousness in the development of real manhood. The same is the case with public schools and hostels. They are growing from year to year. Every year sees the birth of a number of new hostels started in different parts of India. There, old Indian notions of life and living give place to new, and old Indian traits of character suffer by the impact of the latter. The products of the new institutions are neither Indian nor European. Ruskin once said that "the essence of vulgarity consists in imitating the manners of others without comprehending the effect really produced." This is too true in the case of Indians brought up in the modern educational institutions of India. What this imitation of English ways, manners, and life means, in the opinion of the English people, whom we try to ape, has been well expressed by Fielding Hall in his "Passing of the Empire." At page 187, he says:-

"That Indians are often honourable and cultured gentlemen I knew, that in essence, all humanity is one I am never tired of affirming. But there are differences of race, real differences, important differences, differences that the Indian himself should be the last to try to ignore. Every nation is given by nature the qualities peculiar to it, and which it is its duty to cultivate for the world's sake. To attempt to sink your individuality in that of another is an injury not only to yourself, but to the whole world. An Indian Gentleman cannot be an Englishman. It is no use his trying. He only makes himself absurd. He can be something quite as good, if he will cultivate his own talent; but he has not our talent. He is not an Englishman and only an Englishman by birth has that camaraderie with other Englishmen that is essential. Even a Frenchman or a German would not have it."

Fielding Hall then relates in the above book, a story of how even an average Indian looks down upon an Anglicised Indian, and further gives his own view of what an average Englishman thinks of him in his borrowed garb. What an impossible situation an Anglicised Indian puts himself into by trying to imitate the manners of a foreign people, is aptly pointed out by him at p. 193 therein. He says:—

"It is no true ideal for an Indian or Burmese to wish to be an Englishman. Fate allotted to him a different field of usefulness quite as great in its way. An Indian gentleman may be quite as true a gentleman and be not in the least like him. By blind imitation they attempt to attain virtues not inherent in them, and they ignore other virtues which are inherent and necessary to the world. Thy seek after impossibilities and so negative the achievement of possibilities. They dony their own natures."

Even a race so well instructed in English, and so desirous of being Anglicised as the Bengalees, has not been able to make much headway in many of the affairs of this world. It is generally admitted that all their knowledge of law, medicine, science, journalism, &c., has not made them practical men. There are no great merchants, and hardly any great *entrepreneurs among them. All their important trade, commerce, and findustries are in the hands of Europeans or Marwarees. Their agricultural population is, to a large extent, at the mercy of a few adventurers and speculators. In the first year of the great War now going on, their jute growing population was practically ruined, notwithstanding bounteous crops, on account of certain combinations of the jute-dealing people in Bengal-men not born of the soil-not to buy jute above a certain price. No Bengalee was in a position to come to their rescue. While the growers of jute were practically starving, the manufacturers thereof were multiplying their profits several fold. In deploring the want of commercial and industrial enterprise among the Bengalees, Mr. P. N. Bose, the author of the "Epochs of Civilization" and other notable books, in his "Essays and Lectures", at page 33, says :--

"The absence of industrial enterprise is probably more marked in Bengal than in any other part of India, yet English education has made the greatest progress in that province, and all the more important reforms on Western lines, which have been introduced into India, within the last half century have been initiated and developed there. The foundation of the Theistic Church was laid in Bengal.......Bengal boasts of orators who would by no means be unworthy of winning laurels on British platforms of authors of no mean repute, and of legal luminaries who have adorned the highest tribunals in India; but she cannot point to a single individual, who has made his mark in the industrial world, or to a single company, which has successfully carried on any industrial enterprize, mining, manufacturing or even agricultural, on a scale comparable to the operatoins of a third-rate company in the West."

Mr. Bose concisely puts in the above para the strong and the weak points of the English knowing Bengalees. In the lines in which the knowledge of the English language plays a predominant part, the English knowing Bengalees have left their other countrymen behind. For instance, in law, journalism and other lines where English is indispensable, they are far ahead of the rest of the people of India. The late Mr. Gokhale spoke to the same effect about the Bengalees at the meeting of the Imperial Legislative Council held to discuss the Seditious Meetings Act, when speaker after speaker, who was in favour of it, was saying a lot of unpleasant things about them. These are his words:—

"The Bengalees are in many respects a remarkable people. It is easy to speak of their faults. They lie on the surface; but they have great qualities which are sometimes lost sight of. In almost all the walks of life open to Indians, the Bengalees are among the most distinguished. Some of the greatest social and religious reformers have come from their ranks. Of orators, journalists, politicians, Bengal possesses some of the most brilliant. But I will not speak of them on this occasion, because that class is more or less at discount in this place. But take Science, or Law, or Literature. Where will you find another scientist in all India, to place by the side of Dr. J. C. Bose or Dr. P. C. Ray, or a jurist like Dr. Ghose, or a poet like Ravindranath Tagore. My hord! these men are not the freaks of nature. They are the highest products of which the race is regularly capable. And a race of such capability cannot, I repeat be put down by coercion."

There is no doubt that the Bengalees have a genius for picking up the English Language. But in the internal affairs of the people, where English is unessential, the best of them have made hardly any progress at all. Their trade and commerce are, as stated previously, in the hands of the Europeans or Marwarees. And what few indigenous industries and arts they still have, are either in the hands of Europeans or the classes that know no English whatever.

There is a constant complaint in India, that English-knowing Indians do not take kindly to trade and commerce, to industries and arts. The

fact is that they cannot. Trade and commerce are not open to everybody. to every new-comer. As a rule, all the lines are already in the hands of men who either come from Europe, or who belong to the soil and are of the people. The latter have, as a rule, no English education, but they possess two things, a good grasp of their own language, according to the needs of their respective lines, and much business and technical training imparted by or inherited from their parents and predecessors in business. Europeans who come to this country have also a knowledge of both these things, namely, a grasp of their own language and practical training. If the English-knowing Indians want to start anything new, they cannot compete with either of them. All they can do, even after having had technical or commercial training in modern schools and colleges is to serve them in humble positions, and remain servants for life, whether they like it or not. We see such instances from day to day. Where we have aimed higher, we have tried to jump to the top of the ladder without mounting it step by step, and the result is that we have been unable to reach it. The failure of hundreds of banking, insurance and other concerns in this country during the last few years ought to serve as an eye-opener. If we are ever to reach the top, it can be by remaining in touch with the people, and by sound education received through our own vernaculars, and not through a foreign language like English. The men of whose acquirements Mr. Bose and Mr. Gokhale said the above things so eloquently, are quite exceptional men in their respective occupations.

But the province, that is supposed to have made such great progress in English education, has not more than 1.08 per cent of the people who have some knowledge of English. Out of a population of over 46 millions, in Bengal, as it is after the annulment of the partition, there are not more than 4,98,000 men and women who are supposed to have some knowledge of it. But the number of men who have taken higher education, that is, those who have a passable knowledge of the English tongue, is not more than one in twenty five hundred.

A knowledge of the English language, however, has one great draw-back,—it is a very serious drawback—and that is, that those who have it get estranged from the people. The English-knowing Indians generally form a class of their own and are not in touch with the people. There is often quite as great a gulf between them and the people, as there is between the English people who spend the best years of their life in India, and the people of the soil. This estrangement is most deadly to the best interests of the English-knowing men as well as of the people in general. The reason why English-knowing Bengalees are so backward in commerce and trade, in arts and industries, and in many other paths of active life, is

that they form a class of their own, and are generally out of touch with the people. If they were not so estranged from the people, they could have led them in matters of commerce and trade, and in many other activities of life. Generally, English-knowing Indians consider themselves superior persons, and they do not interest themselves in the activities of the common people. They are so much enamoured of the English language, and the position it gives them, mostly in the official world, that whenever the question of the vernaculars as the only suitable media of instruction is brought before the public, the greatest opposition comes from Bengal. At the debate on the substitution of the vernaculars as media of instruction in the secondary schools, in the Supreme Legislative Council of India, in its session of 1915, the principal spokesman against the motion was the great leader of Bengal-the Honourable Mr. Surendra Nath Banerji. Similarly the editor of the Modern Review, a very ably written monthly, as a spokesman of a large number of the English knowing Bengalees, in the April number of 1915, wrote on the subject as follows :-

"The question under discussion should be understood to be distinct from the abolition of the study of English in secondary schools, to which we are absolutely opposed. English must continue to be taught and taught far better than it is at present. It is the only actual Lingua Franca in India at present, it is the only unifying modern language that educated men generally read, it is our principal and practically almost the only means of access to a free nation's literature, it is the language which keeps us in touch with the outside world, it is chiefly through its medium, that we have access to all higher modern knowledge, and it is instinct with the spirit of liberty and democracy".

It is generally believed by English-knowing Indians that free intercourse between the people residing in the different provinces of India has been made possible only after the introduction of railways and the English language. But this, it is submitted, is not quite a correct view of the matter. The very fact that Indian culture is distinct from any other cultures, and that it is common to people residing in such distant places as Hardwar and Rameshwaram, Dwarka and Puri, means that intercourse between the people of one province and another, and especially between the wise and the learned, was very much freer than at present, and that there was even greater unity of thought between people of the different provinces than at present exists. Hindi can be quite as efficient a Lingua Franca among the learned of to-day, as Sanskrit was in pre-British days. Hindi can be learnt by an Indian much better in six months than English in ten years. Then why not adopt Hindi as the language of intercourse between the public men of the present day.

It is quite possible, on account of railways, to travel some 700 or 800 miles a day, and run from province to province and all over India in a few

days, and yet to know next to nothing about any one of them. By the kind of travelling that we do now-a-days, we neither see the country, nor know the people of the other provinces. Since the advent of the railways in india, the contact of the people of one province with the other has generally been like "touch and go", and the supposed unifying influence of modern times is nothing compared with that of olden times, when menmen in search of knowledge and culture-actually lived with the people of the other provinces for a number of years and made themselves thoroughly familiar with their life and thought. That is how knowledge and culture spread from one part of India to another, and how the unifying effect was continued for at least 5000 years.

The knowledge of English is generally cultivated in India at the expense of the vernaculars. For the cultivation of the latter, the modern schools and colleges offer hardly any scope. If English-knowing Indians read more of English literature and less of their own, it is so much morea pity. It is certainly not a laudable idea. On the contrary, it is unnatural that a man should spend so much of his life in the acquision of a foreign language like English. To have access to a free nation's literature and to all modern knowledge, it is not necessary that the country should have all her educational institutions so organised, that instruction to her boys and girls must be imparted principally through a foreign tongue. Is not Japan keeping in touch with modern European thought and life, in spite of her own language remaining the language of instruction in her educational institutions? Although in none of her institutions. is instruction imparted through English, there are many Japanese who know enough English for all practical purposes—something quite as well as we do-and who keep themselves in touch with whatever useful literature is published in that language. With a few hours a week spent in the study, for about three years, of one or the other of European languages sin schools, and some more time spent in private study afterwards, they are able to get sufficient grasp of them, and to remain in touch with the master minds of Europe, America and India. It may not be generally known that they find quite as much, if not more, to learn from Indian thinkers and writers as from those of Europe and America. Professor Hirose, of the Tokio University of Japan which owes her religion to India, the other day, at one of his lectures, said as follows about the writings of Sir Ravindra Nath Tagore, the great Bengalee poet:-

"Since the opening of intercourse with the western countries and the introduction of western civilisation the thinking world of Japan, has been invaded by western thought to the extent of gradually losing some of the traditional traits of old Japan. Of late there have been signs of a general awakening among the Japanese to the inadvis-

ability of discarding their own ways and manners in their zeal to take good things from other nations. At this juncture, the advent of Ravindranath Tagore has proved a God-send. It is a matter of congratulation that the thoughts of Tagore have found their way to the minds of thinking Japanese, who have begun to awake from their exclusive adoration of Western Civilication, and aroused within them a spirit of love and respect for the old traditions of their own country. In this respect our nation is greatly indebted to Mr. Tagore."

It is a pity that, while the thinking Japanese feel the necessity of taking to Indian culture in preference to that of the West, Indians themselves should think of discarding their own in favour of a foreign one.

No doubt, the study of the English language has some advantages for us, and it was not contended by the mover of the aforesaid resolution, that English was to be discarded altogether from the curriculum in secondary schools. On the contrary, he made it clear that, even when vernaculars were made the media, English was to be taught compulsorily as a second language.

It may be conceded at once that we cannot afford to discard the English language altogether from the curriculum of study, if we wish to remain in touch with the outside world. But it must be conceded also that all those, who study in the modern schools and colleges in India, do not do so with a view to bring their people into touch with the outside world. The number of such, even after having had a good grounding in that language, must always be extremely small. The number of workers to that end would not be smaller after the vernaculars were made the media of instruction. On the contrary, when learning is much sounder, which will surely be the case when it is imparted through one's mothertongue, the number of such is bound to increase. Because it is desirable that the people of this country should come into touch with the outside world, it does not necessarily follow that we are justified in forcing such a difficult language as English upon every single boy that aims at higher education, and making him spend from ten tofifteen years and even more of his life in such a pursuit. certainly not in the interests of humanity that all those, who are sent to the modern schools and colleges by their parents, ought to be compelled to learn a language, in which many do not wish to acquire any proficiency at all. English is practically useless in after-life to many * of those who take it. Those who practise medicine, engineering or adopt other pursuits where they have to deal with Indians mostly, have no need of English, and many lose their control over it before long. The only class of people, who profit by the knowledge of English, are a few lawyers who practise in the presidency towns. The court language being English in the latter, those lawyers who have a good command of it are able to compete more successfully with those who have not. One of the reasons why some English Barristers are more successful than many of the Indian lawyers in Presidency towns is that they have a greater command over that language than the latter. The only other class of Indians who has some need of English are those employed in Government service. They must know just enough English to be able to understand

what their superiors mean, so that they may be able to carry out their orders properly. But the two together mean a few thousand men only. The total number of Indians employed in Government service on salaries of Rs. 75 and upwards, that is, men who are likely to have some use for English, and have direct dealings with their English superiors. was about 13,000, during the Viceroyalty of Lord Curzon, and it cannot be much larger now. It will be hardly contended by serious thinkers that, in order to produce a few lawyers, who may be able to examine witnesses and address the courts in the Presidency towns in English, and a small number of Government servants, all the resources of the State available for educational purposes should be devoted to secondary schools and colleges conducted on the present lines. Are not the 99 per cent, who do not avail themselves of English Education, to be taken into any account? This is not a negligible percentage. It is as essential to provide educational facilities for the latter as for the former. The schools and colleges are paid for out of the national funds, and they should consequently exist, not only for the benefit of the few, who can acquire proficiency in English, but also for that of the many who wish to acquire proficiency in general knowledge, or in particular subjects without acquiring a knowledge of the English language. The State is not justified in taking taxes from all classes of Indians for the benefit of one only. For the former, secondary schools and colleges, where education can be imparted through the vernaculars, should be provided. If the State is slow to move in the matter, the people ought to take it up, and start at least a few model institutions. There are many philanthrophists who give away large sums of money for fostering English education amongst their countrymen. If these men understood how beneficial it would be to foster all studies through the vernaculars, they would contribute their charities to the founding of institutions for that purpose. If self-sacrificing and enlightened Indians were to come forward and put their shoulders to the wheel, there would be no insuperable difficulty in starting a few schools that would serve as models for others to follow.

So far as remaining in touch with the outside world is concerned, it would quite meet our national needs, if only a few of us knew English well, instead of the many knowing it imperfectly. English being compulsory in secondary schools, many a youth, who finds it a stumbling block, has to go without higher education altogether. If these young men were given the opportunity to prosecute their higher studies in their favourite subjects through their own vernaculars, some of them might become shining lights in them. For want of such an opportunity, they may this day be retting away somewhere. Many of us must have read of the case of Mr. Ramanujan, a Madrasee young men of great Mathematical acumen.

Having failed at the Intermediate examination of the Madras University, as I understand, strangely in the very subject in which he was a genius, he gave up his studies in disgust and took up a small appointment in the Madras Port Trust. In his leisure hours he worked at some intricate Mathematical problems, and sent his colutions thereon to a mathematical journal. The Professor of Mathematics at Cambridge, who happend to see his solutions, was greatly struck at the novel and original method of arriving at them and was greatly drawn towards the young man. It was at his instance, that the Government of India gave him a scholarship to go to Cambridge for higher Mathematical estudies. When there, he was placed in charge of a mathematical professor, the Ramanujana's method of working and his ideas of Mathematics were so different from those in vogue at Cambridge, that he had to be left to himself and allowed to work out his problems in his own way. He required neither books, nor teachers. All that he required was quietude to exercise his brain, and leisure to think on the Mathematical problems before him. If one went to his room in Cambridge, he could see there a heap of manuscripts containing solutions of great Mathematical problems, and writing materials to jot down the thoughts that came uppermost in his mind, and these pertained almost wholly to Mathematics. I am told that in calculating the problems, he leaves out many of the intermediate steps, which almost every great Mathematician trained in modern methods has to pass through. This young Indian has just been awarded special distinction in Mathematics by the Cambridge. University for many of the researches that he carried on in fields so far untrodden by anybody before him. The time that this young man spent in the study of English up to the intermediate course, might have been more fruitfully employed in evolving something still more wonderful in the mathematical field, if he had the opportunity to do so, as others have in their countries. If nothing else can move our English educated men to advocate 'the use of the vernaculars' in all our studies in secondary schools and colleges, this living instance of Mr. Ramauujan ought to move them. It is an eye-opener. Another young man, a Mahomedan-Abdul Garurkhan-also gifted like Mr. Ramanujan, had been found working at submarine wireless problems. He, too, has been sent to England as a Government scholar to prosecute his further studies on the subject...

Even at the present time, there must be many Indians of genius besides these two young men, who might have served as beacou-lights to future generations by solving problems on many intricate questions if they had had proper training in their early days. But on account of the faulty

system of education in vogue in India, they are wasted to-day as petty clerks in Government or mercantile offices.

To remain in touch with the outside world, all Japanese students are not asked to learn English, German, French, &c. But some of them do learn one or the other language, and by translating the best works of the European authors into Japanese, they bring European learning to the very doors of the people. No one can say that, because Indians know so much more of English than the Japanese, they are, therefore, in greater touch with the outside world than the latter. The contrary, however, is the case.

It is not the study of a language, in which higher spirit of liberty and democracy is breathed, that is essential, in order to be inspired with that spirit. The thoughts expressed in that language, if worthy to be placed before one's own people, can be quite as well conveyed in the vernacular languages of India, and the ideas of liberty and democracy can be studied quite as well from books ably translated, as from the original. In this way French, German, Italian, and Russian thoughts are brought to the doors of the English speaking people, and vice versa; and in this way they remain in daily touch with all that is going on in the outside world. If the media of instruction be the vernaculars of the country, there is no reason to fear, so long as English is not discarded altogether. that India could be shut out of all outside knowledge. All the books on liberty and democracy could be translated into vernaculars. And the knowledge conveyed therein could be communicated on a far larger scale than at present. As it is, many of those who read these books in the original, fail to grasp the real spirit of liberty and democracy that is breathed therein. Indian readers of English books at present form a microscopic minority. But when the vernaculars become the media of instruction, the reading public will be a very large one, and useful books will be required and read, not by hundreds, but by thousands, if not by bundreds of thousands.

Many attempts are being made in the various parts of India to improve the vernacular literature. The Sahitya Parishads held in the various provinces of India have this object in view. But the attempts made to do so, at periodical meetings held for the purpose, are half-hearted at the very best. They discuss the question in a halting manner. No one goes to the root of the evil, and the result is that very little progress of the right kind is made towards the development of the vernaculus. Very few Indians care to write books therein, and what few there are find a very poor market in their same. Bengal made the greatest

effort in this line. In 1907 was started the National Council of Education at Calcutta. One of its objects was so to improve the Bengali language as to make it self-sufficient for all purposes. Huge funds were subscribed for the purpose, and there is still a very large income derived therefrom to carry on the aforesaid work. Sir Gurudas Bannerji, at its inaugural meeting as president, made the following pertinent observations:—

"We keenly feel our dependence on foreign countries for the supply of manufactured articles, some of which are among the necessaries of life. How much more-keenly should we feel our dependence on a foreign language for the supply of words, for the interchange of thought, not only in serious discourse in scientific subjects, such as Mathematics, Psychology, Economics and Physics, but even in ordinary conversation on many matters of every day concern. And the council, in that branch of its work which seeks to supply our language with necessary words for the interchange of thought, is entitled to encouragement and [help from every true supporter of the Swadeshi movement. Mark the lesson which history teaches. The ignorance of the middle ages was not dispelled and the revival of learning was not complete until knowledge began to be disseminated through the modern languages. Nor can we expect any revival of learning here, until it is imparted not merely in its primary stage, but in the higher stages as well, through the medium of the vernaculars."

The reason why the National Council of Education has almost failed to make much headway in promoting education on the above lines, is that in Bengal, counsels on this question are too much divided, and the preponderating voice is with those who are for education through English and through English alone.

A nation's literature is the means of getting at the thoughts and ideas of that nation. If we wish to study the thoughts and ideas of ourforefathers, we can get at them through the ancient literature of our country. But if we read only foreign literature without any reference to our own, as most of the English-speaking Indians do, we not only remain ignorant of what our literature contains, but we actually lose touch with the thoughts and ideas embodied in our own, and also with our own people. Two children of the same parents brought up in different places, amidst different environments, and unfamiliar with each other's language are bound to remain greater strangers to each other, than the children of different communities brought up in one and the same institution and speaking the same language. Literature has a powerful effect in the development of man. One's whole nature is influenced by the kind of literature he studies. Many English-knowing Indians, whose knowledgeof the British people and British institutions is derived from English books, are far more anglicised than those who have come in intimate touch with them, simply because their thoughts and ideas have been borrowed from that literature. How important a factor one's own language is, to every individual in the formation of his nature, his thoughts, his feelings, and his whole human individuality, has been ably put by Max Nordau in his book on "Paradoxes." At page 318, he says:—

"It is by language that the individual assumes the manners of thought of the people that has formed and developed this language, and entrusted to and organically inserted into it the most secret emotions of its spirit and the finest details of its worlds of conception. It is by language, that he becomes the adoptive child and heir of all the thinkers and poets, the teachers and leaders of the people; it is by language that he comes under the influence of that universal power of suggestion, which is exercised by the literature and history of a people on all who compose it, and makes them to resemble one another in their feelings and actions. Language is in very truth manhimself. It makes it possible for him to assume the most numerous and most important of the features in the phenomenon of the world, and it is the chief instrument by means of which he reacts upon the internal world."

Such being the importance of one's language, it behaves every well-wisher of this country to have no stone unturned, in order to alter the present unnatural system of instruction through English, and to substitute in its place the Indian Vernaculars as media of instruction in all the Indian Schools and Colleges.

The spirit of a nation is generally reflected in its literature and arts. If one wants to gauge the mind of any nation, he must study its literature and arts. There it is possible to find what were its impulses and motives, its aims and aspirations at the particular period in which they came into existence. If you wish to study India, as she was before the days of steam and electricity, and follow her ideals, you will have to dive deep in her literature, and travel over India to see its architecture and sculpture, its painting and carving. In these you will find life-like pictures of her, as she has been during the last five thousand years, full of religious thoughts and religious life. The works of ancient art that still exist in almost every part of India, as vividly depict her life and thought as her vast stores of literature.

As a rule the mind grows on what it is fed with. In communities where God and religion are much talked about and realised through their literature and arts, the people become God-fearing and religious. This is particularly so in India. Hindu daily life is based on religion. There is hardly an hour of a Hindu's existence when religion is totally divorced from it. Most of the ancient Hindu literature consists of books on religion and morals, and even to-day when the English-knowing Indians are being weaned away from it, the books that find most sale throughout the length and breadth of the country are the books that treat of religion and morals.

Home life has had a great deal of influence on Young Indian minds, in the matter of religion and morals. The ancient stories and songs that are almost daily repeated in Indian households give them an idea of the great Indians who lived highly religious and ethical lives and it is particularly such lives that are held out before the young people as lives worth following. It is on account of such practical teaching, that one finds such a large number of Indians, both in towns and villages, still living ideally harmless lives—harmless not only towards their kith and kin, but harmless towards the whole human as well as the animal creation. The doctrine, "Love thy neighbour as thyself," though it is preached among the Christians also, has a greater place in the hearts of the Hindus than amongst any other people.

It is on account of such teachings, that the qualities most cultivated in Indian minds are humility and kindness, gentleness and generosity, truthfulness and honesty. Every traveller, whether from the East or

the West, that visited India during the last two thousand years, was specially struck with the above mentioned traits of the Hindus, and some of them, like Magasthenes the Grecian Ambassador to the court of Chandra Gupta, Chinese travellers Fa Hian and Hinen Tsang, the Italian traveller Marcopolo and Col. Sleeman in our own times, have left permanent records of what they saw of the Hindu characteristics, and noted particularly the above virtues. To the modern European mind, these are the qualities of the weak and the timid and they treat them accordingly. The qualities that are held up before the young European minds as manly virtues, are proud assertivesness, and brusqueness. As to truth in schools and colleges, the follwing from the "Passing of the Empire" by H. Fielding Hall, a retired member of the Indian Civil Service throws great light on the kind of teaching in the Western Educational Institutions.

"No English school-boy is ever taught to speak the truth, for the very simple reason that he is never taught to desire the truth. From the very first he is taught to be totally careless as to whether a fact is a fact; he is taught to care only whether the fact can be used on his side, when he is engaged in playing the game."

In Indian households the first thing that children are taught is सरवाद नास्ति परी धर्म: "There is no religion higher than truth" and सरवमित्र नवने "Only truth conquers". The following popular Shloka is indicative of what qualifications Indian Society considers necessary for a gentleman.

यथा चतुर्भिः कनकं परीक्ष्यते । निघर्षणच्छेदनतापताडनः तथा चतुर्भिः पुरुषः परीक्ष्यते । त्यागेन इत्लिन गुणेन कर्मणा

"As gold is tested by connoisseurs by rubbing (against a testing stone), by cutting, and by heating it, so is a person tested by them by renunciation, chastity, virtues, and meritorious deed."

If the modern school teaching in India were a continuation of the home teaching, as it should be, and for which every Indian should strive, much of the present difficulty would never have come into existence. As it is, they are antagonistic to each other. And, therefore, it is the more incumbent upon Indians to aim at getting absolute control of the Educational Institutions of their country in their own hands. The success of the National movement in India depends principally upon the kind of teaching in her schools and colleges, and upon what part truth and fearlessness are to play in the lives of the young people who attend them. India requires numbers of men of absolutely un-impeachable character-men who would not be moved from the right path by official smiles and patronage, cowed down by official frowns and threats, or

perturbed by the shadowing of the C. I. D. It is an open secret that every-Indian of some consequence, including men like the late Mr. Gokhale, is kept under watch by the C. I. D., and shadowed wherever he goes. At one time the thing was done some what quietly but particularly since the war began it is done more or less openly, to the great annoyance of the man under watch. While travelling, he is a marked man. His ticket is examined at the instance of the C. I. D. at almost all important stations, and he is questioned as to his name, whereabouts, etc., and whatever information is thus received is communicated by telegrams to the ports and stations on his route. All throughout his travels the C. I. D. treat him very often as a suspected criminal, whose case is under inquiry. From the time he leaves his place of residence until his return from his destination, all his movements are watched, sometimes at his own expense. (the C. I. D. man often manages to ride on the same conveyance in which his man is going), as a rule manages to give him as much annoyance as it is in his power to do, and quietly hears and notes down every word that falls from his lips, when he can manage to be near enough to hear him.

In times like this, the Indian leaders have to be even more truthful and fearless. The success of the National movement depends upon their thoughts, their words and their actions. According to the saying "you reap what you sow," if we sow truthfulness and, fearlessness broadcast in the soil, the harvest must be the very same virtues multiplied many-fold. This idea is admirably put in the following few lines of the Bhagwad Gita, the most popular of the sacred books of the Hindus:—

खबदाचरित श्रेष्ठस्तत्तदेवेतरीजनः स बत् प्रमाणं कुहते लोकस्तद्गुवर्तते ॥

"Whatever a great man doeth, that other men also do; the standard he setteth up, by that the people go."

The health of a nation and its elevation depend solely upon the character of its leaders, and the amount of their self-sacrifice in the interest of their country. If the leaders are weakened, they can hardly make any head-way in steering the national ship safely to port. Only if they are fearless and wise can they do so. To know if a nation is making real progress, one must try to find out, who are its leaders, and whether they are men of character. The following words of Lord Morley, for sometime Secretary of State for India, on this question, are worthy to be noted by those who wish to serve their country particularly as leaders.

* The decisive sign of the elevantion of a nation's life is to be sought among those who lead or ought to lead. The test of the health of a people is to be found in the utterances of those who are its spokesmen and in the action of those whom it accepts or chooses to be its chiefs. We have to look to the magnitude of the issues, and the height of the interests, which engage its foremost spirits. What are the best men in the country striving for? And is the struggle pursued intrepidly and with a sense of its size and amplitude, or with creeping foot and blinking eye?"

The greatness of a nation is made by its greatest men, and those are looked upon as the greatest men of a nation, that have made truth their principle of action in life. The reason why Mr. M. K. Gandhi is given splendid ovations wherever he goes, and why his words are listened to with such rapt attention wherever and whenever he speaks, is that he is a man of truth. Though he has had some European education, he is really a product of Indian culture. Tolstoy in his day was not only one of the greatest Russians, but one of the greatest Europeans that ever lived. The reason why he was held in high esteem by almost every nation during his life-time, and why he is still venerated by many, is that he was a man of truth. When young, Tolstoy had led somewhat of a riotous life. Sometime before he was about to marry, he made a copy of his diary, wherein he had kept a faithful record of his past life, and sent it to his future wife. No one else could have dared do such a thing, who was in earnest in marrying the woman of his choice. But he did it, because he was a man of truth.

Indian Culture teaches that the foundation of man's character must be deeply laid upon the bed-rock of truth, and that he is a true man who walks along the path of truth and honesty, that he has marked out for himself. The true man so lives his life that the corner of the world in which he lives is made the happier, the nobler, and the wiser for his having lived in it.

India would have a very bright future if, in her schools and colleges, her children were taught to cultivate truth and fearlessness, and that could be done if they were brought up in an atmosphere of Indian culture. Only those men could be fearless, who are truthful. In order to engender fearlessness, it is necessary to cultivate truthfulness also. How Indians in former times were fearless could be shown by an instance mentioned in McCrindle's "Ancient India." When Alexander the Great was in India, he was told about a sage by the name of Dandamis who was well-versed in religion and living an austere life. This Dandamis had his home in the woods. As his bed he used to have a pallet of leaves, drinking water from a neighbouring fountain, and living upon roots and herbs. Hearing about him, Alexander felt auxious to see him. He sent a messenger by

the name of Onesikrates to fetch him from where he was. The story given in the book is rather a long one, but as it gives a faithful picture of the life of one of the great men of the day, as observed by a foreign visitor, depicts his character very vividly, and gives a realised idea of the Hindu philosophy of life of the day, it will not be amiss if I quote the message as delivered by him and the fearless reply of Dandamis in extenso. The messenger, approaching Dandamis, said.—

"Hail to thee, thou teacher of the Brahmins. The son of the mighty God Zeus. King Alexander, who is the sovereign lord of all men, asks you to go to him, and if you comply, he will reward you with great and splendid gifts, but if you refuse, he will cut off your head."

Dandamis with a complacent smile heard him to the end, but did not so much as lift his head from his couch of leaves, and while still retaining his recumbent position said as follows:—

* God, the Supreme King, is never the author of insolent wrong, but is the Creator of light, of peace, of life, of water, of the body of man, and of souls, and these he recsives when death sets them free, being in no way subject to evil desire. He alone is the God of my homage, who abhors slaughter and instigates no wars. But Alexander is not God, since he must taste of death, and how can such as he be the world's master who has not yet reached the shore of the river Tiberoboas, and has not yet seated himself on a throne of universal dominion?..... Know this, however, that what Alexander offers me, and the gifts he promises me, are all things to me utterly useless; but the things which I prize, and find of real use and worth, are these leaves, which are my house, these blooming plants which supply me with dainty food, and the water which is my drink, while all other possessions and. things, which are amassed with anxious care, are wont to prove ruinous to those wheamass them, and cause only sorrow and veration, with which every poor mortal is fully fraught. But as for me, I lie upon the forest leaves and having nothing which requires guarding, close my eyes in tranquil slumber, whereas had I gold to guard, that would banish sleep. The Earth supplies me with everything even as a mother, her child with milk. I go wherever I please and there are no carea with which I am forced to cumber myself. Should Alexander out off my head, he cannot also destroy my soul. My head, slone, now silent, will remain, but the soul will go away to its Master, leaving the body like a torn garment upon the earth, whence also it was taken. I then becoming spirit shall ascend to my God, who enclosed us in flesh and left us upon the earth to prove whether, when here below, we shall live obedient to his ordinances, and who also will require of us, when we depart hence to his presence, an account of our life, since he is judge of all proud wrong-doing; for the groams of the oppressed become the punishmentsof the oppressors."

"Let Alexander then terrify with these threats those who wish for gold and for wealth, and who dread death, for against us these weapons are both like powerless, since the Brahmins neither love gold nor fear death. Go, then, and tell Alexander this Dandamis has no need of aught that is yours, and therefore will not go to you, but if you want anything from Dandamis, come you to him."

Alexander, on receiving from Onesikrates, a report of the interview, felt a stronger desire than ever to see Dandamis, who, though old and naked, was the only autagonist in whom he the conquerer of many nations, had found more than his match.

In her present state of existence, India requires men of the above type who would say to the rulers exactly what they felt on the problems of the day.

In other respects also the ideals of the West and the East are different, and in some things diametrically opposite, and that is how the two sets of men and women are so different to each other. The literature and the topics of conversation in society have a great influence on individual members. If a community is fed with religious and ethical literature, and the topics of conversation therein pertain to religion, morals and duties of man, there will be many men in that community who will be religious, moral, humane, and dutiful. If the topic of conversation, on the other hand, in a community is about military service and war, about cricket and football, about eating, drinking, and merry-making, about the rights of man, naturally in that community there will be many fighters and sportsmen, gourmands and drunkards, pleasure seekers and selfish men. Constant talks of fighting this nation or that deaden the feelings of humanity of those who hear them, tend to draw them away further and further from the Godhead, and bring them nearer the brute creation.

. The reason why Europe is such a large military camp, why every European citizen has to be a soldier, and European nations are constantly engaged in wars either in the East or in the West, whether against each other or against the quiet, gentle and peaceful people of Asia, Africa and America, is, that war is the constant theme of discussion and conversation by the press and the public. In Asia the business of fighting was left to a small class, who fought for the country either for love or money. The rest of the population was left to itself to cultivate the arts of peace and the ideals of humanity. In India, when even there was a fight, it was invariably confined to aspirants for kingship. The conqueror placed himself in the position of the one that was conquered, and the people accepted him as their king. The people in general were not commandeered to take part in any such fight, they sided with nobody, and did not care who was the king, so long as the kingly power was exercised according to the constitution of the country, laid down by the wise and the learned Rishis of old. Whenever the aspirants for power fought against each other, they confined their fights to a very narrow area and

let the general population carry on their usual avocations. Magasthenes, who was present at some of the battles fought by the army of Chandragupta Maurya, was astonished to see that, while the fighting was going on on one side, the agriculturists were carrying on their operations unimpeded even by the enemy, on the other. He says:—

than the others. Being, moreover, exempted from fighting and other public services they devote the whole of their time to tillage; nor would an enemy coming upon a husbandman at work on his land, do any harm, for men of this class being regarded as public benefactors, are protected from all injury. The land thus remaining unravaged, and producing heavy crops, supplies the inhabitants with all that is requisite to make life very enjoyable. The husbandmen themselves, with their wives and children, live in the country, and entirely avoid going into town."

But since democracy, that is, the shibboleth of the rule of the people by the people and for the people, has caught the western imagination—for in reality it is nothing but a shibboleth—every European man in the states at war against each other is commandeered to fight, and every European woman is cajoled to contribute her share in it in some shape or another. Whenever war is declared by one set of rulers against another, often at the instance of one man, it is looked upon as a war of one nation against another. Each side sets the law of conscription in motion, and thereby forces every man generally between the ages of seventeen and forty-five to be on the field of battle, when called upon to do so. In any previous age it would have been hard to believe such a state of existence. But we are face to face with the grim reality.

Each one of the Enropean nations, in modern times, remains constantly on the look-out for an opportunity to grab its neighbour's territory, and the only arbiter between them is the number of battalions, and the amount of munitions, that each one is capable of bringing on to the battlefield. For the predicament in which Europe is placed in these days, she has to thank the perfection which the mechanical and chemical sciences have reached. It is on account of the inventions of the mechanicians and chemists, that it has become possible to mobilise from place to place millions of soldiers, fully equipped with all sorts of deadly weapons, and to feed them all quite as well as if they were in barracks. It is on account of the inventions of the mechanicians and the chemists that it has become. possible to kill by thousand at a time on the modern battle-fields. Let Indians fully realise the facts as they are, and that can only be by realising what ancient Indian culture and ancient Indian institutions were. How rninously expensive to life and property the present war is may be judged from the fact that the cost of shells, projectiles and other missiles of distruction used in the single battle of Neuve Chapelle, which lasted about a couple of days very briskly, was reported to have been more than that of the whole of the South African Campaign of 1899-1902. The number of killed on both sides must have been enormous. And yet in European society there is as much daily talk of war aggression and aggrandisement at the expense of one's neighbour as there is about Dharma in Indian society. There the word "war" is in everybody's mouth all times of the day, and almost everybody-man, woman and child-glories when his or her nation is going to take up arms against another. European children are taught to love war while they are in their teens. There are Cadet Corps attached to almost every school, just as there are cricket and football teams. Almost everybody is taught to make himself a good marksman and a good sportsman. War is welcomed by Europeans, because it brings additional territory, and additional material wealth to the nation. They feel that the present world is too small for their energies. But rise and fall has been the fate of nations, that have worshipped the God of War. When the physical powers of fighting nations are exhausted, as they are bound to be exhausted in course of time, they have very little else left to stand upon, and they succumb before their more powerful warlike neighbours. The nations that were once great, are no longer so, because the main prop, which maintained them as nations, was no longer available to them; Many ancient nations had evolved a certain amount of civilisation in their so-called halcyon days. But the continuance of it depended upon their fighting qualities only. Once their physical powers were exhansted, they sank into insignificance, and their civilisation became a thing of the past. Many thinkers predict a similar fate for modern civilisation also. Mr. Uchimura, the well known Japanese educationist, writing his views on European Civilisation in a Japanese Journal the Yorodzu, says;-

"What is the Western Civilisation after all? They say it is the Christian Civilisation. But, is it? Is it a civilisation based upon the Crucified one? Certainly it is not. It is a civilisation based upon the Crucifying one, the Devil, a murderer from the beginning."

"War, war—war upon the slightest pretext—that is their cry and unborn propensity. To say that their civilisation is based upon the gospel of peace is the grossest falsebood, the present conflagration of Europe is the veriest evidence, written with hell fire upon the face of the sky, that theirs is a sham civilisation, beautiful upon the surface, but within, dead vacuity. Like the thunder storm in a summer afternoon, the two poles of human wrath come to crash to spend itself, to leave the sky clear for the better and more beautiful thing."

And that is the civilisation that Japan is now following. She is yet quite young in modern civilisation. She adopted it only after she had

defeated China in 1895, but in the short period that has since elapsed. she has begun to look quite as old as any of the Western Countries. The political, the economic, and the social condition of Japan has changed, as it were, in the twinkling of an eye, and all that to the disadvantage of 90 per cent of the people. The Japanese thinkers deplore the condition to which Japan has been reduced by her adoption of modern civilisation. They think that, in giving up the old Chinese Civilisation, the Japanese nation has given up what was best in her. She is already being troubled with many of those problems with which Europe is afflicted. Her criminal population is increasing. Capitalism, and militarism, industrialism and commercialism, are as rampant in Japan as in Europe. The labour troubles, that are the root cause of the disorganisation of society, in Europe, have already become quite as serious in the course of a few years as in that continent, where the growth is of a much longer duration. Even the anarchism of Europe has penetrated to Japan. All this is due to her giving up her old traditions, her old culture, and her old institutions.

Count Hayashi, at different times Ambassador to the various courts in Europe, and latterly Minister for Foreign Affairs in Japan, in his "Disclosures of a Diplomatist," in expressing his views on the Chinese civilisation in its relation to Japan, says:—

In Europe, there is a great deal of talk about Liberty, Equality, and Fraternity. By the constitutions of the various states, all men are supposed to be free, equal, and bearing brotherly feelings towards each other. But on closer examination of the actual working of these ideas in daily life, it is not difficult to see that they are honoured more in the breach than in the observance. Henry George, in "Progress and Poverty" says: to base on the state of most glaring social inequality, political institutions under which men are theoratically equal, is to stand a pyramid on its apex."

America is supposed to be the first democratic country in the world-But have the people in general any power whatever? No doubt every American has vote. But what good is a vote, if that vote cannot be given to the right man at the right time with a free will? Are they free to give it to the right man? Dr. L. P. Jacks, Vice Principal of the Manchester College, Oxford, who visited America, the greatest democratic country in the world, and studied American politics on the spot, lately said:—

"The professional politics of America are corrupt and debased to an extraordinary degree............As things now are, America is not a self-governing country except in name. The power behind the Government is the political machine which is controlled by the 'bosses' and has become a veritable tyranny. The machine is a contrivance of remarkable ingenuity, which can only be compared with the inventions of Edison; and its object is simply that of depriving free men of the free use of their votes. I came in contact everywhere with men who grown under its tyranny."

At the last election of the President of the United States, when Dr. Wilson was successful, Mr. Roosevelt was willing to stand as a candidate for the Presidency. But it was publicly declared, that nine million dollars would be required to secure his election, and that the sum was not forth-coming for that purpose.

One of the commandments of the Bible is "Do not kill." so-called Christian countries entirely disregard it. Their argument against following this doctrine is that, if they did so, they would soon lose their hold on the black, the brown and the yellow races, and their supremacy over them would be gone before long. Even their priests, including those of the Roman Catholic Church, who are strictly prohibited from shedding blood, have to join military service, and many of them do so without the least compunction. When France put into force the law of conscription, calling upon her manhood of all classes to prepare themselves for war-service in 1914, the whole of the French manhood offered their services quite cheerfully, and the priests were not behind the rest in coming forward. They too-les pretres militaires de France (the military priests of France)-are reported to have shown conspicuous bravery ou many a battle field in the present war. The theory of the law of conscription is that, as "the state," which, in other words, is a combination of individuals and their mutual interests, gives protection to the lives and property of all who live under it, it has the right to each man's services in the army and the navy whenever required. Those who accept protection to life and property from their respective states cannot rightly refuse to give their services to her, when called upon to do so. To refuse, to give the services would be nothing else than licensed individualism, and that cannot be tolerated in a well-ordered state. If the conscientious objector says to the state that he owes her no such duty, then the state would be quite justified in saying, that she too owes no duty to him, and she need

not give him and his property any protection thereafter. Such a theory is opposed to Hindu doctrine and Hindu instincts and they can never endorse it.

A man in enjoyment of real liberty ought to have a right to say whether to take up arms against his neighbour with a view to kill him. But in Europe no one is free in this respect. He has to fight whether he likes it or not. The humanitarians of Europe, though a microscopic minority, would do away with war altogether, if they could. They preach the doctrine in time of peace, but when war breaks out, they too contribute their share like any other individual. By the law of conscription of most of the European states, every one is bound to enlist himself as a soldier between the ages of 17–20 and serve in the army from two to three years, just as every Buddhist, at some time or another of his youth, gets himself ordained as a priest, even if it be only for a short time, according to the tenets of that religion.

A European is liable to be called to fight at any time upto the age of forty-five, when his state is at war with another. Those who refuse to enlist themselves are liable to heavy sentences of imprisonment, and those who refuse to fight in time of war, may be court-martialled and even shot. However much one's conscience may revolt at shedding human-blood, he is obliged to fight against any one who raises arms against his state. Very few seem to have the courage of their convictions. Even those who conscienciously believe war to be the devil's creation, hardly ever refuseto comply with the requirements of the law, and bear the penalty prescribed by it. Very few like to take such a risk, though the risk is greater still on the battle-field. There are, no doubt, exceptions. Such men are court-martialled and sentenced to long terms of imprisonment, because. their conscience would not allow them to take part in it. Such barbarous practices tell their own tale and show how the nations of Europe are * brutalising themselves for transient material gains at the cost of humanity in general.

The doctrine of conscription is repugnant to Hindu, Buddhist and Jain feelings. They would never endorse it voluntarily, even if the whole world were placed at their disposal. But if European domination is to pervade the entire world, a time may come when conscription may become the Law of the land, and every Hindu, Buddhist, and Jain may be obliged to shoulder a gun, and march against the enemy of his state. Before such a day comes, let us prepare ourselves, to make our spiritual notions felt in other lands also. This can be done by introducing Indian culture into our schools and colleges.

Many of the European thinkers do not give a long tenure of life to modern civilisation. They say it is too material to last long. The late professor Huxley deeply lamented the state of things to which his people were reduced and hailed "the advent of some kindly comet which would sweep the whole affairs away as a desirable consummation." He says in "Government Anarchy or Regimentation" Collected Essays Vol. 1:

"Even the best of modern civilisations appears to me to exhibit a condition of mankind which neither embodies any worthy ideal nor even possesses the merit of stability. I do not hesitate to express the opinion that if there is no hope of a large improvement of the condition of the greater part of the human family, if it is true that the increase of knowledge, the winning of a greater dominion over nature which is its consequence, and the wealth which flows from that dominion are to make no difference in the extent and the intensity of want, with its concomittant physical and moral degradation amongst the masses of the people, I should hail the advent of some kindly comet which should sweep away the whole affair as a desirable consummation."

Mr. Sidney Webb, lecturer on Political Economy at the City of London College, in one of his essays says:—

"Whatever may be the advantages of the present state of society one thing is certain, that it cannot last very long."

Many nations have come into existence and gone during the last five thousand years, but the only nations that have outlived them all are the Indians and the Chinese. They promise to live so long as they are able to control materialism, and relegate it to its proper place by the aid of spirituality. The teachings of the past ought not to be forgotten in a moment of dazzling materialism. The advantages of wealth, power, and position, are, at the best, ephemeral. Those nations that drank too deep at the fountain of materialism, had to fight their envious neighbours, when at the zenith of their power, and were, in the fulness of time, wiped out of existence by the latter to be themselves wiped out by others. This process has been as old as the world itself. Only those, whose institutions are tempered with spirituality, have had a long tenure, and India is in that category. She has often been conquered physically but her inmost soul has never yet been subjugated. It is the conquest of the soul that it is to be most dreaded. What is a century or even five centuries of physical conquest, in the life-time of a nation, so long as her soul remains unconquered. None of the temporary advantages of a material life ought to drive India into it, and the only way to

avoid it, is not to allow the young minds that are being trained in our schools and colleges to be contaminated by it. To do that, it is absolutely necessary that the study of Indian literature and Indian institutions should form the principal part of the curriculum of studies therein. The absence of such courses of study from the modern schools and colleges has already told adversely upon some Indian minds. Dr. Coomaraswamy, in his book "the Message of the East," gives a very graphic picture of how far denationalisation has already gone on in the minds of young India. He says:—

"She (Young India) has treated the concrete and material achievement (of the West) as an end in itself, and endeavoured rather to imitate results than to assimilate methods. Indians would learn just so much science as should enable them to compete with the West; just so much "art" as to supply the material for popular eleographs and picture postcards, and the requirements of the quaint trade; just so much music as to play on the harmonium or listen to a gramophone; just so much architecture as to build a suburban villa (with the aid of cast-iron beams). It has become a question rather of what to get than what to give. Not unnaturally, we get but the busks of Western Culture."

The mischief so far done in this direction is not insurmountable. The soul of India still largely remains saturated with transcendentalism, and that is why the materialism of the West has not yet evoked such a great response from the Indian people as one would have conceived after intercourse with Europe for over 150 years. So long as the mental ontlook and the habit of thought of the people remain spiritual, India will remain Indian. To make her more and more Indian ought to be the aim of all the Indians—Hindus, Mahomedans, Christians, and Parsees. And that can be done by re-introducing Indian culture in Indian schools and colleges through Indian languages, and under purely Indian control.

APPENDIX.

OPINIONS

OF

Eminent Men on the desirability and suitability of Indian Vernaculars as Media of instruction in Indian Schools and Colleges.

A very weighty pronouncement was made by the Viceroy of India at the Conference of Directors of Public Instruction of the Indian Provinces held at Delhi on the 22nd January 1917, on education through the Indian Vernaculars. He said:—

"There is one more matter with regard to which I should like to say a few words. I am fully aware that it is highly controversial and that it has more than once been the subject of discussion, but it lies so deep in the foundations of our education that I think it well to bring the matter forward, especially at a time when our task is, as I have said above, to examine and consolidate our education. I refer to the relative claims of English and vernacular teaching. At the present moment we rely on English as the medium of our higher instruction. This is due mainly to the fact that English is the passport to employment and that vernacular text tooks are not available. But the consequence is obvious. Students who endeavour to grapple with abstrace subjects through the medium of a foreign tongue, and in many cases through their mediocre acquaintance with that tongue have perforce to memorise their text-books. We criticise adversely this tendency to memorise, but to my mind it reflects credit on the zeal of the students who rather than abandon their quest for knowledge commit to memory whole pages, nay whole books, which they understand but imperfectly. This is, of course, a mere travesty of education. I had an opportunity the other day of conversing with a prominent Indian gentleman on this very subject and he told me his personal experience when he took up history, one of his subjects, and found-though he is an admirable English scholar now-that his acquaintance with English was insufficient to enable him to understand his text book; so he resolved to memorise the whole book. In the course of his examination he had a question the answer to which he knew lay in a certain page, but he was uncertain what portion of the page was relevant so ex abundanti cautela he wrote out the whole page. For this he obtained fewer marks than he thought he was entitled to. On remonstrating with

the examiner he was told that his answer contained so much irrelevant matter that it was clear that he did not rightly comprehend the question. I think this piece of evidence illustrates the defects of our present system. I would ask you, and I ask myself, as university men how should we have fared in our education if it had been wholly through the medium of a foreign tongue. I doubt whether we would not have abandoned the attempt in despair, and I am lost in admiration for the grit of these boys who make a gallant attempt to surmount the difficulties imposed on them by a vicious system. The remedy seems to me to lie in one of two directions: either we must teach in the vernacular as long as we can and put off to the latest possible moment the use of English as a medium of instruction; or we must concentrate our attention more closely on the teaching of English. Can any middle course be suggested which is on sound educational lines? I understand that it was arranged, some two years ago in the legislative council that local governments should be addressed on this subject generally when the war is over. I have no intention of bringing up the question for decision in advance of the time so arranged, but I wish it to receive thoughtful consideration without bias so that when the time comes not only will you have discussed and thought over it in your own provinces and be ready to give us your opinions, but the best minds in India will also be equally ready with their opinion.

Mr. M. Rangacharys in his memo on the proposed addition of an oriental faculty to the Madras University said:—

"The talk about the utter incapacity of our Vernacular languages to serve such a purpose (being the vehicle of conveying knowledge of European learning) is a baseless assertion made by those who have never seriously tried to clothe Western ideas in Eastern language. However it is quite true that although much of Western thought is now in so many ways being expressed in more than one of our Vernacular languages, there are no proper text books in these languages bearing on all the different subjects of modern European learning. The difficulty of getting these text-books produced is not at all insuperable; with the encouragement and the direction that the University can so well give to the production of all the required new works in our Vernacular languages, the difficulty arising from the absence of suitable text books on any subject will be a thing of the past positively in less than ten years."

Prof. Hamman of Kumbakonam in a lecture in 1887 said:-

- Sir Bartle Frere, at one time Governor of Bombay in his Convocation speech at the Bombay University in 1862 said:—
- "A pupil will learn English more quickly and thoroughly if he has a competent knowledge of the Vernacular."
- "A knowledge of the student's own Vernacular language should be required as indispensable in any one who applies for admission to this University. It is, I am convinced, one great security for the future prosperity as well as utility of the University."
- Sir Alfred Croft, Director of Public Instruction of Bengal, said :-
- "It is certainly the modern theory in England that a boy's intellect should be strengthened by instruction in his own Vernacular, before he attempts the study of a foreign language, and that he will thus be enabled to grapple with the difficulties of the foreign language much more successfully."
- Captain W. R. M. Holroyd, Officiating Director of Public Instruction of the Punjab in 1868 said:—
- Mr. Chintaman Hari Sohoni in answers to questions from the Baroda Education Commission said:—
- "As no nation can subsist on borrowed capital, so no nation can acquire knowledge through the narrow channel of a foreign language."
- "By the adoption of Vernaculars as Media, a great deal of time and mental trouble will be saved, and a great deal of originality will be developed."
- "Students have at present to bear a double sort of burden. They have not only to master Euclid, but also the language. In their answers they have to guard against the mistakes of language first, and those of thought afterwards."
- "For many years, Pleaders' and Hospital Assistants' examinations were held in vernaculars, when text books in different languages were prepared. Had these examinations continued, by this time there would have been many books on Law and Medicine in different vernaculars."

Mr. D. E. Wachha, in answers to questions from the Baroda Commission said:-

Vernacular Education—I am a strong advocate of this education. We are indeed most poor in vernacular literature. But such literature can only flourish and prosper when it is well patronised, just like arts. There must be patrons of literature to foster and stimulate the growth of vernacular literature. The best mode, in my opinion, is to found a local University on a modest scale for conferring degrees in the principal vernaculars of the Bombay Presidency. The State (Baroda) should conduct it at its sole expense; candidates from all parts of the Presidency should be allowed to compete for degrees in vernaculars. Special encouragement should be given to graduates of Bombay University. Cold Weather Readings, Lectures and so forth should be instituted. Lecturers might be paid a small honorarium. The suggestion could be well elaborated by a Board of Vernacular Literature consisting of distinguished Vernacular Scholars."

In the Educational Report of Madras for 1863-64, it was stated that:—

The Trustees of the Pachaiappa College at Madras in their report of 1897 say:-

"The Trustees are convinced that the teaching of the non-language subjects would become more real, and could be made more rational and interesting, if native children were taught in all non-languages less from English text-books, and more through Vernacular Manuals."

The president of the meeting at which this report was read, the Hon'ble Mr. C. Arnold White, Advocate General, considered the above "to be a matter for serious consideration."

Mr. Waman Abajee Modak, Principal, Elphinstone High School, Bombay in an essay on the position of Vernaculars in our Educational System said:—

"For the effectual enlightenment and advancement of the several provinces, recourse must be had, sooner or later, to the Vernacular languages of those provinces, improved and fitted, not by the action of individuals only, but by a system of national education, to take up the work of national progress."

The Madras Native Association said :-

"The quickening of general intelligence caused by a national scheme of study in the vernacular language would enable the pupil to learn the English language with much greater rapidity than would otherwise be the case."

The Indian Spectator in 1898 said :-

"Some day or other we shall have to face the problem whether a system of national education can be a healthy one, which imparts knowledge through the medium of a foreign tongue."

Mr. J. Lee Wurner of the Madras Civil Service said :-

"Surely, there can be nothing sound in a system of instruction which leaves a boy at the conclusion of its course unable to express accurately either his own or the thoughts which are given to him, in his own language."

THE SCHOOLS COMMITTEE'S OFFICE,

BOMBAY, 11th June 1917.

THE ADMINISTRATION REPORT OF THE SCHOOLS COMMITTEE FOR 1916-17.

I.—THE COMMITTEE.

1. The undermentioned gentlemen were the members of the Schools Committee at the commencement of the year under review:—

CHIMANUAL H. SETALVAD, Esq., B.A., LL.B. (Chairman).

THE HON'BLE SIE IBRAHIM RAHIMTOOLA, KT., CALE,

THE HON'BLE SIR DINSHA EDALJI WACHA, KT.

N. V. MANDLIK, Esq., B.A., LL. B.

DR. JEHANGIR J. CURSETJI M.D.

RAMCHANDRA BHASKAR MANTRI, Esq., J.P.

DR. NADIRSHAW H. E. SUKHIA, LM & S., L.V.Sc., F.R.S I. (Loud.), J.P.

DR. MORESHWAR CHINTAMAN JAVLE, J.P.

2. The number of the members of the Schools Committee having been increased to 12, under the City of Bombay Municipal Amendment Act VI of 1916, there were no retirements during the year and the undermentioned four gentlemen were elected additional members, with effect from 1st January 1917:—

MIRZA ALI MOHAMMED KHAN, Esq., M.A., LL.B.

HIRALAL DAYABHAI NANAVATI, Esq., B.A., LL.B.

F. A. M. H. VINCENT, Esq., M.V.O.

RAMERISHNA BHRIKRISHNA NAVALKAR, Esq., B.a., LL.B.

- 3. The year's term of the office of the Chairman expiring with the calendar year 1916, Mr. Chimanlal H. Setalvad, the Chairman, was unanimously re-elected in January 1917.
- 4. Mr. D. G. Padhye, M.A., continued to hold the office of the Secretary of the Committee throughout the year.

*II.—GENERAL PROGRESS AND SUMMARY.

5. The steady and substantial progress all-round, which marked the administration of the last year, was continued in the year under review. The noteworthy features of the year under report are succinctly enumerated below:—

(a) Twelve new schools were opened during the year, bringing the total number of Municipal Schools to 195. Six of them were Boys' Schools and six Girls'. Two Special Classes were also opened, one of them for Gujerathi Boys at the Sion Marathi Boys' School and the other for Factory Boys at the Delisle Road Marathi School.

1-11-10 (b) The total expenditure and receipts amounted to Rs. 5,68,398 and Rs. 5,51,430 respectively, the Municipal Funds and the fees collected contributing Rs. 5,10,000 and Rs. 40,516 towards the latter amount. The corresponding figures for the previous year were Rs. 5,02,173, Rs. 5,01,082, Rs. 4,62,000 and Rs. 37,681, respectively.

- (c) The total number of pupils in the Municipal Schools on 31st March 1917 was 23,987, as against 21,669 on the corresponding date of the previous year. The monthly average on the rolls rose from 20,221 to 22,829. The percentage of rise in the two cases was 11 and 13, respectively. It is interesting to note that the number of pupils in the 140 private schools, to which "Grant-in-aid" was given in the year under review, was only 15,623 on 31st March 1917 and showed a rise of less than one per cent, on the 15,536 pupils, that attended on the corresponding date of the last year the 132 schools, to which grant was then given.
- (d) To cope with the increased numbers and secure greater efficiency of teaching, 121 new teachers were added during the year under review, bringing the total to 924.
- (e) Two Music teachers, two Sewing mistresses, two Drill masters, and two Drawing teachers were added to the existing staff for special teaching.
- (f) With a view to impart efficient instruction in the prescribed English in the 4th standard classes in the Girls' Schools, five Special Lady Teachers for the subject were appointed during the year.
- (g) The work of guiding and supervising the instruction given in Municipal Schools claimed the special attention of the four Superintendents, who also carried on

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the Annual Examinations of all the classes in the Municipal Schools, besides co-operating with the officers of the Government Educational Department in conducting the Public Fourth Standard Vernacular Examination of the City.

- (h) Out of the 1,813 pupils that appeared from the Municipal Schools in the said Fourth standard examination, 1,391 came out successful, showing the highly satisfactory per centage of 77.
- (i) Urgent representations were made for the pushing through of the 10 lakhs programme for the erection of school buildings at the joint cost of the Government and the Corporation. The laying out of small gardens in the compounds of 5 Municipal schools, having buildings of their own, was begun. Mention may here be made of an offer made by the Honourable Sir Ibrahim Rahimtoola, Kt., to bear the cost of a building for accommodating a Municipal Dispensary and a school on an Improvement Trust plot at the Sandhurst Road, the negotiations in regard to which have not yet been completed.
- (j) Strenuous endeavours to improve the housing and conveniences of the various schools were continued throughout the year. 25 schools were removed to better premises. For some of these, were secured newly built premises. Additional accommodation was rented for 32 more schools. Efforts in this direction will be continued but it may be mentioned that with only about a dozen exceptions due to peculiar circumstances, the Municipal schools may now be regarded as satisfactorily located on the whole. At least half of them can be said to be very well located indeed.
- (k) The furniture and other equipment of the schools were considerably improved during the year, old and useless dead stock being disposed of and over Rs. 20,000 being spent in supplying new furniture, charts, pictures, magazines, books and other educational requisites of various kinds, some useful for boys and others for teachers.
- (1) To secure improved conservancy, the fixed monthly contingency grants of 51 schools were raised by Rs. 900 per annum.
- (m) Arrangements were made to put into operation on 1st March 1917 a new scheme, approved of by the Corporation, for the Medical examination of Municipal school children, to be carried on for 3 years as a further experiment, the new

feature being a systematic intimation to the parents of the ailments—discovered—and special arrangements for their treatment at Municipal Dispensaries.

- (a) The education of the poorer classes claimed particular attention. The maximum percentage of free studentship allowed was raised from 15 to 30 in 16 Marathi and 5 Gujerathi Schools, and a special free Factory Boys' Class was opened in the Delisle Road Marathi School. The number of pupils in the 16 Mill hands and Depressed Class schools rose from 1,641 to 1,804.
- (a) Rs 1,824 were spent during the year towards 45 ordinary scholarships for girls and pupils belonging to Depressed and Backward classes and 18 Middle School scholarships. Prizes of the value of Rs. 4,102 were awarded to the school children from the Municipal Funds and Rs. 294 from the income of the Prize Funds held in Trust by the Committee.
- (p) Special efforts were continued to increase the proportion of Trained Teachers. Their number rose during the year from 340 to 409 out of a total of 924 teachers. Every trained teacher applicant was welcomed. Fifty-six stipendiaries were maintained at the Ahmedabad and Poona Training Colleges. The Committee's Gujerathi Training Class for Males and the Urdn Training Classes for Males and Females were conducted with success, 23 out of the students passing various training examinations. Other inducements were also offered. In the result, 74 persons from amongst the Committee's stipendiaries and teachers obtained Training certificates during the year.
- (q) The policy of improving the status and prospects of teachers and fostering in them zeal and interest in their work was continued with good results. The Triennial promotions due in the year to Trained teachers were assessed liberally and came to an increase of Rs. 1,365 per mensem in their salaries, whilst Rs. 287 per month represented the annual promotions to the Untrained teachers. An old standing grievance of Untrained Urdu teachers of long standing, who had entered the service in times when there was no training certificate examination in Urdu and who though occupying the posts of Headmarten, got the same pay as other untrained

teachers, was removed, Rs. 2-1-5 per mensem being granted as a special allowance to them. Whilst good work was rewarded, a dozen cases of faulty or irregular conduct on the part of teachers were made the subject of disciplinary measures calculated to maintain a proper standard of efficiency in the school staff.

- (r) Rs. 65,208 were given during the year under review, as Grant-in-Aid to 140 schools as against Rs. 58,780 given to 132 schools in the previous year. Two of the old schools registered for the grant were closed, whilst ten new ones were placed on the list for a total assessment of Rs. 1,719. The grants of 30 schools were re-assessed and raised by sums aggregating to Rs. 4,792.
- (s) The policy of helping private educational institutions of a philanthropic kind by lending to them gratis the use of Municipal school premises was freely expanded, 14 new permissions being given in the course of the year. The number of such institutions thus rose to 47, out of which 26 were Night Schools with about 1,500 pupils on the rolls.
- (t) During the year under review, two large donations offered and accepted by the Corporation in previous years, duly materialized. One was the gift of Rs. 25,000 made by Bai Valibai, widow of Sheth Vallabhdas Vishram Mowji. A Sanskrit school maintained by her has been, under the terms of the gift, taken over by the Schools Committee and amalgamated with the Municipal Gujerathi Girls' School located in Anantwadi, which is now called the "Valibai Girls' School," and 50 per cent. of its pupils are allowed as free students. A sum of Rs. 11,000, plus Rs. 860 interest, was received as the result of High Court Proceedings in fulfilment of a bequest made by the late Mr. Parmanand Raja. The Durgadevi Marathi Boys' School is now named after him. The funds of both these donations have been invested as Trust Funds in the Committee's hands.

Smaller donations were also made to various schools during the year to the extent of about Rs. 500 in books and other articles and Rs. 750 in cash for prizes to the children or for the school libraries or museums. Of the donations, Rs. 101 came from Goculdas Jadhavji, a like amount from Mr. Dwarkadas Goverdhandas and Rs. 50 from Bai Meherbai H. Kolah.

A separate and appreciative mention has to be made of a novel philanthropic effort of the Seva Sadan Society

- of Bombay, connected with our schools. During the year under review, they have undertaken the feeding (light refreshments in the recess hour) of poor and necessitous children in one Marathi Boys' School, one Marathi Girls' School and one Urdu Boys' School, the Schools Committee bearing the cost of the incidental arrangements.
- (u) The "Belgian Children's day" was fittingly observed in the Municipal Schools, Rs. 1,400 being the total amount collected. In August last, the War Anniversary was duly celebrated, and the schools were given a holiday on the occasion of His Excellency the retiring Viceroy's departure from India. The schools were also closed on 23rd January 1917 as a tribute to the memory of the Hon. Mr. W. H. Sharp, M.A., the late Director of Public Instruction of the Presidency.
- (v) During the year an important interview took place at the instance of the Collector of Bombay, between the Schools Committee, the Director of Public Instruction and three representatives of the Mill-owners' Association in regard to the education of factory children. The active co-operation of the Mill-owners, as the necessary condition for success, having been recognized, it was agreed that the Schools Committee should open schools at places selected by the Mill-owners, the latter undertaking to take measures by way of offering special inducements to encourage factory children to attend these schools.
- (w) It may be mentioned, by way of concluding the above record of the Schools Committee's work during the year that it made 11 reports, some of them elaborate and detailed, on various subjects of importance, at the instance either of Government or the Corporation or its Committees a list whereof is given in Appendix C.

III -MUNICIPAL SCHOOLS AND ATTENDANCE.

6. The following table gives a summary of the total number of Municipal Schools of all description with the aggregate number of pupils thereat for the past two years. The total increase in the number of schools was 12, 'out of which 4 were Marathi Girls', 1 Gujarathi Girls', 1 Urdu Girls', 8 Marathi Boys' and 8 Urdu Boys' Schools. One Gujerathi Class was attached to the

Sion Marathi Boys' School and a Special Factory Boys' Class was attached to the DeLisle Road Nirashrit Free Mill School:—

				Mun	icipal.			
Classes of Scho	ools.		1916	6-17.	191	1918-16.		
			Schools.	Pupils.	Schools.	Pupils.		
MARATHI.								
Day Schools— Middle Schools	***			343	3	270		
Primary for Boys	***		60	9,859	57	9,130		
Do. for Girls	***		27	3,077	23	2,767		
Total of Marathi	Schools	•••	90	13,079	83	12,167		
GUJERATHI Day Schools— Muldle Schools—	•••	***	1	82	1	ÜÜ		
Primary for Boys	343		81	3,651	31	8,548		
Do. for Girls		**-	18:	2,020] 17	1,846		
	Total	-	60	5,763	49	5,460		
Night Schools	***		1	11	1	28		
Total of Gujerathi	Schools	4	51	5,764	50	5,488		
URDU.				-				
Day Schools— Middle Schools	***	•••	474	***	1-44	•••		
Primary for Boys	***	***	43	4,201	41	3,276		
Do. for Girls	***	***	7	836	6	655		
	Total	***	50	5,037	47	3,931		
Night Schools	***	1+2	4	167	8	83		
Total for Utdu f	Schools	140	₽4	5,144	50	4,014		
Grand Total of Marat and Urdu Schools	hi, Gujer	at:	198	23,987	183	21,669		

^{7.} The aggregate number of 23,987 pupils shown above was the number on the rolls on the 31st March 1917. The monthly average on the rolls was 22,829 as against 20,221 for the previous year. The average monthly attendance was 17,649 as against 15,934. It will be observed that the rise was confined

1

mostly to the Marathi and the Urdu Schools, probably because there is not scope for similar expansion of Gujerathi pupils.

- 8. The total number of the Municipal Boys' Schools including four Anglo Vernacular Schools and 5 Night Schools, was as shown in the above table, 143 and that of the Girls' Schools 52. The total attendance in the former was 18,054 and in the latter 5,933.
- 9. It may be mentioned, however, that girls are allowed to attend in several of the Boys' Schools, particularly in the Urdu Schools, and some Girls' Schools, have on their rolls boys too. Thus the 18,054 pupils of the 143 Boys' Schools consisted of 15,988 boys and 2,066 girls and the 5,933 pupils of the 52 Girls' Schools consisted of 5,774 girls and 159 boys.

IV. FINANCE.

- 10. The opening balance of the 'School Fund' was Rs. 36,295. The total receipts amounted to Rs. 5,51,430 as against Rs. 5,01,082 for the previous year. The contribution from the General Municipal Fund for the year was Rs. 5,10,000 as against Rs. 4,62,000 in the previous year. The income from fees rose from Rs. 37,681 in 1915-16 to Rs. 40,516 in the year under review. The Trust Funds and other sources yielded about Rs. 913.
- 11. The total expenditure for the year was Rs. 5,68,398, being Rs. 66,225 in excess over that for the year 1915-16. The increase was chiefly due to (1) the employment of over a hundred additional teachers, (2) the securing of improved accommodation for the schools, (3) the opening of 12 new schools, (4) the payment of enhanced Grants-in-Aid to some schools and fresh grants to others, and (5) improved equipment of the schools. The year closed with a balance of Rs. 19,327.
- 12. The average cost per pupil (including the cost of the supervision establishment) was Rs. 20.9 as against 20.5 last year.

 The cost was distributed as under:—

Teaching		***		Rs.	12.7
House Rent	* * *	• • •	***	22	5.5
Miscellaneous	• • •			1,	2.7

Total Rs. 20-9

13. Appendix "A" gives the details of the actual income and expenditure under the various heads and Appendix "B" the Balance Sheet.

V.-TEACHERS AND TRAINING CLASSES.

14. The following table shows the total number of ordinary teachers in the Municipal schools for the year under review and the previous year. The trained and untrained teachers are shown separately.

Figures for 1916-17.

			Number of Teachers.										
Classes o	1141000		Trained. Untrained.		₹.	Total.							
		Male.	Female	Total	Male	Female	Total.	Male.	Female	Total			
Marathi	***	195	74	269	164	42	206	359	116	475			
Gujerathi		72	97	109	77	60	137	149	97	246			
Urdu		30	1	31	132	40	172	163	41	203			
Total		297	112	409	373	142	515	670	254	924			

Figures for 1915-16.

	1		<u> </u>			<u> </u>			1	
Marathi		179	63	235	135	82	167	307	95	402
Gujerathi		55	29	84	81	48	129	196	77	213
Urdu	•••	31	***	21	145	22	167	166	22	188
	ĺ									
Total		248	92	341)	361	103	463	609	194	803

15. The increase in the number of teachers during the year was 121. It was due to the opening of new schools, the growth of the pupils attending old schools and the demands of efficiency elsewhere. The policy initiated since the year 1915-16 of giving preference to Trained teachers even for provisional or acting appointments continues and an appreciable number of Trained teachers was thus secured. Thirteen full time teachers

were added during the year to the Special teachers, whose total at the end of the year, stood as under:—

Drawing Masters		***	8
Drill Masters	***	***	6
Music Masters		***	6
Sewing Mistresses	•••	• • •	10
Knitting Masters	***	•••	2
English lady teache	rs	***	5
•			97

16. To the above number have to be added 6 teachers of the three Teachers' Training Classes maintained by the Committee. The number of peons and hamals was 79. Thus the total staff consisted of 1,046 persons.

VI.-Inspection and Supervision.

17. The new arrangements made last year, placing the three sets of Municipal Schools in Bombay in charge of the three Superintendents separately, worked very well. Messrs. A. R. Bhaiji, B.A., H. G. Anjaria, M.A., LL.B., and K. B. Padgaokar, B.A., continued to hold the offices of the Superintendents of the Urdu, the Gujerathi and the Marathi Schools, respectively. and Mr. B. R. Manerikar, B.A., that of the Assistant Superintendent, Marathi Schools. Mr. Anjaria was on leave for one month and 16 days and Mr. T. M. Trivedi, the Head Master of the Bhuleshwar Gujerathi School, acted for him. All the Superintendents showed commendable zeal and activity in the discharge of their duties. Messrs. Padgaokar and Manerikar paid 334 and 378 visits respectively to the schools in their charge and report improved teaching, as the result of their They drew up new curricula for Music and Drawing both of which have become equally popular in the Girls' Schools. Messrs. Anjaria and Trivedi paid 328 and 47 visits and the former put forth special efforts to give instruction to the lady teachers. These gentlemen conducted the annual examinations of all the schools personally. Mr. Bhaiji paid 220 visits and examined all the Urdu Schools in his charge twice. As an index of the improved teaching in the Urdu Department, it may be mentioned that three of the Schools passed cent. per cent. boys at the Fourth Standard Examination and a pupil of the Imamwada Urdu School secured a Government Middle School scholarship. Mr. Bhaiji considers that the indigenous Koran Schools interfere considerably with the further growth of Municipal Urdu Schools. These indigenous schools, of which there is a large number in the City, though in-efficient, are entirely free in accordance with the traditions of Islam and attract a large number of pupils. The Superintendents actively helped, as usual, the Government Deputy Educational Inspector, Bombay, in holding the Bombay Vernacular Fourth Standard Examination and were this year associated even in preparing the final results. All this together with the expansion of the schools meant increased work in the offices of the Superintendents. An additional clerk and a peon were added to the staff as a relief.

VII.—RESULTS OF EXAMINATIONS, ETC.

18. The following table shows the results of the important examinations at which pupils from the Municipal schools appeared during the year:—

	No of Caudidates (appearing).	No. of Candidates (successful).
Vernaenlar Fina) Examination	51	26
Fourth Standard Vernacular Examination	1,813	1,891
Middle School Scholarship Examination	3	2
Mary Carpenter Scholarship Examination	25	2

VIII -- MEDICAL INSPECTION.

- 19. The results of the Experimental Medical examination of Municipal school children, conducted in 1914-15, having been regarded as encouraging, the School's Committee drew up the following scheme for a further experiment on a more extended scale, which was eventually approved of by the Corporation.
 - (1) That the most advisable course would be to carry on as an experiment for 3 years a Medical Inspection of the Municipal school children.
 - (2) That the operations should be confined to one initial examination of all the school children, the re-examination of such of them as are specially noted for such re-examination and fresh examination of all new comers.
 - (3) That intimations of the ailments discovered should be sent to the parents and the guardians, with the suggestion that they may avail themselves of free treatment at the existing Municipal Dispensaries, and

- (4) That the following staff he employed for the purposes of the said Inspection for the said period of 3 years:—
 - (a) One male qualified Medical Inspector, pay Rs. 150 per month, including carriage allowance.
 - (b) One male Assistant of the Sub-Assistant Surgeon class, pay Rs. 75 per month, including 'carriage allowance.
 - (c) One lady qualified Medical Inspectress, pay Rs. 150 per month, including carriage allowance.
 - (d) One Nurse as assistant to (c), pay Rs. 75 per month, including carriage allowance.

To this have to be added two peons, each on Rs. 12-13, and an expenditure of about Rs. 25 per month for contingencies."

20. In pursuance of the above scheme, the Schools Committee appointed Dr. G. V. Kher, L.M. & S., Medical Inspector and Dr. (Miss) Gulbai M. Doctor, L.M. & S., Medical Inspectress, and Dr. V. D. Afinwala, L.M. & S., as Assistant Medical Inspector and Miss Tarabai Rajapurkar as Assistant Inspectress. They commenced their work from March 1917.

IX,-MISCELLANEOUS.

21. Seven of the Trained teachers retired during the year. They were: (1) Abdul Rehman Abdul Rajak, (2) P. G. Guhagarkar, (3) K. M. Kulkarni, (4) V. B. Kamat, (5) L. C. Pendse, (6) M. R. Usapkar, and (7) G. C. Purohit; of these the first three were Headmasters of long and creditable service. The other four teachers were senior assistants. There were 3 deaths amongst the teachers.

D. G. PADHYE, Secretary, Schools Committee.

APPENDIX A.

Statement of Actual Income and Expenditure of the "School Fund" for the year 1916-17.

BECKIPTS.	Amount,	Expenditure,	Amount,
l. Balance on the 1st of April 1818	Rs. a. p.	A. Schools, 1. Head Masters and Teachers	R4 a, p,
2. Fees from Municipal Schools	40,516 16 O	2. Servante 3. Rent	10,914 5 8
3. Contribution from the General Municipal Fund	5,10,000 0 0	4. Cost of Class Books 5. School Furniture	1,825 18 5 15,179 8 11
4. Government Grants-in- Aid towards Buildings	••••	6. Prises 7. Contingencies and Miscollaneous	4,102 9 7 19,930 0 7
6. Interest on Endowments or Investments	76 4 9 0	8. Scholarships in Schools	£39 0 g
4. Miscellaneous	149 🏚 0	Stipends of students under Training as Verna- cular Teachers	8,569 13 .5
		10. Superintendent's Esta- blishment	13,477 6 2
		11. Grants-in-Aid to Pri- mary Schools	(6,1 08 3 0
		12. Library and Museum	1,410 18 \$
į		18. Medical Inspection	2 83 13 G
		or Investments	1,635 10 9
		B.—Buildings.	
		I. Municipal Original Works	****
		2. Repairs to Municipal School Houses	1,289 8 8
		Beiance on \$1st March 1917.	19,327 9 8
Total Rs.	5,87,128 6 4	TotalRs.	5,87,725 0 4

^{*} Loss incurred by the sale of Government Paper purchased from the Surplus Cash Baiance.

THE SCHOOLS COMMITTEE'S OFFICE,

BOMBAY, 11th June 1917.

D. G. PADHYE,

h June 1917. Secretary, Schools Committee.

APPENDIX B.

, Balance Sheet of the "School Fund" for the year 1916-17.

LIABILITIES,	Ha. a. p.	aserts.	Re.	B.	p.
To Deposit Account	1,615 16 3	By Bank of Bombay			
To Hurkisondas Brillal Prise Fund: Primoipal. Ba. 500 0 0 Interest 913 5	. 509 12 5	Government, &c., Paper De- posit Ascount	18,900	0	0
To Dr. Biancy Prize Fund:— Principal Rs. 1,000 0 0	5	By Bank of Bombay			
Interest , 26 31 11 To Madhaydas Rughuathdas	1,096 11 11	Surpius Cash, Government, &c., Paper Deposit Ac- count	10,891	0	4
Principal Rs. 500 0 0 Interest 29 4 0	823 ± Q	By Bank of Bombey—			
To Jivoore Lallubhai Scholar- ship, &c., Fund:— Principal ks. 1,000 0 0 Interest 2 44 6 0		On account of Securities from Contractors	1,390	0	
To Bachubai S. Bengalee-	1,084 p	By Advance Account-			
Principal Ba 1,000 0 0 Interest 47 0 2	1,047, 8 2	Rs s. p. To the Secretary, 130 0 0		•	
To B. S. Taki Schelarship & Prize Fund:— Principal Ra. 1,100 © 0 Interest 84 13 4	1,194 \$8 4	To the Superin- tendent— Marathi Schools 80 0 6 Gujerati , 20 0 0			
To Permanand Raja Endow- ment Fund :	4,000	Gajerati , 20 8 t	290	0	o `
Principal, Rs. 18,800 0 0 Interest 13 830 0 0	14,630 Q Q	By Advances—Miscellancous,,	, 80	ō	0
To Bai Valibai Vallabhdas "Vishram Mowji Endowment Fund:				·	
Principal Rs. 25,000 9 0	25,000 0 0	By Actual Cash Balance—			•
To Paper Deposits from Con- tractors	9,547 1 0 C	In Bank of Bom-Rs. a. p			
To Donation for Training Urdu Teachers	200	In Office Treasury 770 6 9	86,096	2	8
To N. S. Bengales Donation.	400	-			
To Cutchi Memon Scholar- ship	28 6 0				
To S. M. Edwardes Scholar- ships	9 0 0	And the state of t			-
To Income and Expenditure Account Balance on Sixt March 1917	10,327 0 8	nddd mae ar y mae a na			
Total Rs	66,129 2 8	Total Ra. ••	60,123	2	đ

THE SCHOOLS COMMITTER'S OFFICE, BONDAY, 11th June 1917. D. G. PADHYE,
Secretary, Schools Committee

APPENDIX C.

- Reports made by the Schools Committee.
- 1. (Per Resolution No. 38 of 12th April 1916):
 Report sent to the Corporation, stating the
 Schools Committee's views regarding proposed
 amendment of the Municipal Act empowering the
 Municipal Commissioner to be present at the
 School Committee's meetings, etc.
- (Per Resolution No. 89 of 28th June 1916): Report sent to the Corporation describing the measures taken to secure better premises for Municipal Schools.
- (Per Resolution No. 116 of 19th July 1916): Report sent to Government through the Municipal Commissioner, stating the Schools Committee's views on certain proposals for the Improvement and Extension of Female Education in India.
- 4. (Per Resolution No. 167 of 23rd August 1916): Report sent to the Municipal Commissioner as to the advisability of buying the S. P. G. Mission Church in Kamathipura as a site and building for a Municipal School.
- 5. (Per Resolution No. 168 of 23rd August 1916):
 Report sent to the Corporation stating the School Committee's views on a letter from Government in regard to the subject matter of the By-laws of the School Committee and the proper procedure for sanctioning them.
- (Per Resolution No. 223 of 4th October 1916):
 Report sent to a Corporation Committee detailing the measures taken by the Schools Committee for the education of the Depressed Classes.
- (Per Resolution No. 227 of 11th October 1916): Report sent to the Corporation on the subject of the Medical Inspection of Municipal School children.
- (Per Resolution No. 251 of 1st November 1916)
 Report sent to Government, stating the Schools

Committee's views in regard to a proposal to substitute "Continuation Classes" in all the Districts for the First Year Classes at the Poona and the Ahmedabad Training Colleges.

- (Per Resolution No. 370 of 28th February 1917): Report sent to a Corporation Committee, giving certain information as to the working of the Free Studentships allowed in Municipal Schools.
- (Per Resolution No. 399 of 7th March 1917): Report sent to the Corporation: re: Training of Urdu School teachers and the status of teachers with U. P. Training Certificates.
- (Per Resolution No. 400 of 7th March 1917):
 Report sent to the Corporation, detailing the programme adopted by the Schools Committee for opening new schools in the year.

D. G. PADHYE, Secretary, Schools Committee.

THE SCHOOLS COMMITTEE'S OFFICE,
BOMBAY, 11th June 1917.

APPENDIX D.

The Aided Schools.

The following table shows the number of Aided Schools with the attendance thereat. The amount of grant paid to them from the "School Fund" during 1916-17 was Rs. 65,208 as against Rs. 58,780 for the previous year:—

		∆ id	led;					
Class of Schools.	1916	-17.	1915-16.					
	Schools.	Pupils.	Schools,	Pupils.				
MARATHI.								
Day Schools	46	4,900	45	4,909				
Do. for Girls	16	1,653	. 15	1,605				
Total	62	6,553	60	6,514				
Night Schools	13	260	11	202				
Total of Marathi Schools.	75	6,813	71	6,716				
GUJERATHI.								
Day Schools-	59	4,149	52	4,297				
Do. for Girls	22	5,099	19	3,904				
Total	54	7,248	61	7,801				
Night Schools	2	99	. 2	1 33				
Total of Gujerathi Schools.	86	7,347	68	7,434				
URDU.	- -			 -				
Day Schools - Primary for Boys	6	953	6	1,135				
Do. for Girls	2	466	1	215				
Total of Urdu Schools	8	1,419	7	1,350				
TAMIL.	1	44	1	86				
Grand Total of Marathi, Gujerati, Urdu and Tamil	140	15,623	152	15,536				

THE SCHOOLS COMMITTEE'S OFFICE,

D. G. PADHYE,

Pombay, 11th June 1917.

Secretary, Schools Committee.

APPENDIX E.

Race of Pupils.

The number of pupils in the Municipal and Aided Schools according to their race was as under:—

, <u>.</u>		1916-17.	٠.	1915-16.			
Race.	Munici- pal-	Aided.	Total.	Munici- pal.	Aided.	Total.	
Enropeans and Enropeans and Enropeans	*a-		414		8	. 2	
Portuguese and Nati Christiaus	ve 104	411	515	104	381	465	
Hindoos	17,789	7,934	25,723	16,664	8,179	24,843	
Mahomedans	5,758	2,984	8,657	4,571	2,799	7,370	
Buddhists		34 .	904	***	***	***	
Pareis	340 S	3,671	3,911	.223	3,659	s,88 3	
Others	101	703	804	107	516	623	
Total .	28,987	15,623	89,610	21,669	15,636	37,205	

THE SCHOOLS COMMITTEE'S OFFICE,
BOMBAY, 11th June 1917.

D. G. PADHYE,

Secretary, Schools Committee,

APPENDIX F.

The following is a rough estimate of the number and attendance in Unrecognized and Unaided Primary schools in Bombay:—

Clas		Schools.	Papils.				
~ ·	Ma	rathi.					
Primary for Boys	***	Pan	710	***	43.2	27	929
Do. for Girls	***	***	***	***	***	1	31
			Total	***		28	960
	Gu	jerathi.	•			**************************************	
Frimary for Boys	pac	***	219	343	***	22	1,609
Do. for Girls	***	***	•••	***	••	5	951
			Total	***	***	39	2,500
	ľ	rd u.					
Primary for Boys	•••	***	***	***	P22	19	1,108
Do. for Girls	**,	***	***	***		1	20
•			Total	•=•	••• }	20	1,128
		Grand	Total	***		. 80	4,648,

THE SCHOOLS COMMITTEE'S OFFICE, BOMBAY, 11th June 1917.

D. G. PALHYE,

Secretary, Schools Committee.

APPENDIX G.

The Progress of Primary Education in Bombay.

A .- Under the Joint Schools Committee.

Year.	Year. No		Increase or Decrease.	No. of papils.	Increase or Decrease.	Total Expendi- ture.	Increase or Decrease.
-			i,			Rs.	Rs.
1890-91*	•••	63	434	6,134	994	81,861	4E4 .
1908-09†	•1•	102	→ ± 0	10,314	+4,180	2,54,888	+1,73,027
		_	,				

- Being the first year of the Joint Schools Committee.
- † Being the last year.

B.—Under the (Municipal) Schools Committee from year to year.

					*	-	1
1909-10	•	114	+ 13	11,559	+ 1,34ā	2,88,202	+ 83,914
1910-11	471	127	+ 13	19,255	+ 1,696	3,30,890	+ 42,688
1911-12	•••	148	+ 15	·15,861	+ 2,606	8,38,263	+ 7,373
1912-13	4.0 *	160	+ 18	16,716	+ 985	3,78,088	+ 8 9,825. ,
1918-14	***	174	+ 14	13,846	+ 2,100	4,87,815	+ 59,727 •
1914-15	667	179	+ 5	18,046	- 800	4,77,963	+ 40,148
1915-16	***	183	+ 4	21,669	+ 3,623	5,04,178	+ 24,210
1916 17		195,	+, 12	23,987	+ 2,318	5,68,398	+ 66,225
				• ;			· .

THE SCHOOLS COMMITTEE'S OFFICE,

BOMBAY, 11th June 1917.

D. G. PADHYE,

Secretary, Schools Committee.

English Pamphlet No. 2.

The General Secretarial Board of the District Gongress Committees, Bombay.

Primary Education in the City of Bombay.

(A paper read before the Members of the District Congress Committees on 29th August 1916.)

BY

A. V. THAKKAR, L. C. E.,

(Member, Servants of India Society, Bombay).

Servants of India Society's Home, Girgeon, Bombay.

Price One Anna.

BOMBAY.

Printed at the Bombay Vaibbay Press,

The General Secretarial Board of the District Congress Committees in Bombay.

The Girgaon, the Bhuleshwar, the Mandvi, the Fort, the Eyculla and it North Bombay District Congress Committees in Bombay have, at their respetive meetings, decided to start Educative and Propogandist work on Congrelines in the City of Bombay and have authorised the General Secretarial Boar consisting of all the Secretaries of the said District Congress Committees to care out this work on their behalf. The programme as approved of by the Committees, consists of public lectures on different political subjects, papers be read by members on the different problems of the Indian Administration publication of Sir S. P. Sinha's Presidential Address in the varoaculars and the starting of a small library of books on politics.

Members of the General Secretarial Board:—Mr. Velji Lakhamsi Nappo Mr. Husseinbhoy A. Lallji, Dr. Poonsey H. Meisheri, Mr. K. H. Kayan Mr. Meghji Vassanji, Mr. Devji Raisey Joveri, Mr. T. S. Nazim, Mr. Tenrur D. Kapadia, Mr. Gulabchand Devchand Javeri, Mr. Motilal Vallabhji, Mr. T. Kulkarni, Mr. Dhirajlal M. Vakil, Mr. W. T. Halai, Mr. J. K. Mehl Mr. Laxmidas Haridas, Mr. K. N. Mahale, Mr. A. R. Gadakari, Mr. Nagardi Vatsaraj, Mr. Nanabhoy F. Mama, Mr. M. K. Azad, Mr. S. S. Pershi Mr. C. B. Lalaye, and Dr. B. S. Govande.

Secretaries, General Secretarial Board:—Mr. U. K. Trivedi and Mr. N. Joshi (Servants of India Society).

Treasurer, General Secretarial Board :- Mr. Motilal Vallabhaji.

Primary Education in the City of Bombay.

~:0:----

Review of the Report of the Administration of the Schools Committee of the Municipal Corporation of Bombay for the year 1915-16.

SHORT HISTORY.

The Department of Primary Education in the City of Bombay was managed and controlled by the Government up to the year 1889. The Corporation contributed a small sum towards the expenses and had no voice in the management thereof. With the passing of the Bombay City Municipal Act of 1888, the control passed on to a Committee composed jointly of nominees of the Government and the Corporation, called the Joint Schools Committee. The expenses were divided between the Corporation and the Government, in this way that the contribution by the former plus fees from pupils was :o, be not less than double the Government grant. When the Joint Committee ame into existence in 1890-91, the Government handed over to the Committee 62 schools with 6100 pupils. This Committee remained in charge f elementary education in the City up to the close of the year 1908-09. here was very slow progress made during this period of 18 years, the increase a the number of schools being from 62 to 102 and of pupils from over 6,100 o 10,300. During this period there was always some friction between the lovernment and the Corporation in this matter and the result was that there ras no appreciable increase of expenditure, which is the same thing as of the umber of schools and scholars. The increase of 66% in 18 years for a rowing city of the size of Bombay is obviously very slow.

At the beginning of 1909-10 the full control of education and with it the ability for the whole expenditure for the same was transferred to the orporation under the policy of 'give and take' of the Police Charges Act 1907. No doubt a spurt came with the transfer and during the seven sars from 1908-09 to 1915-16 progress has been, though not what it ight to be, decent. However, the progress should not be measured only by a result already achieved but also by the results to be achieved and by the round that still remains to be covered. We have to take account of the rge number of boys and girls that have still to be brought to school, and whom schools have still to be opened.

PROGRESS OF EDUCATION.

In appendix F of the report for 1915-16 just published is given a table showing the progress of (the quantity of) education since the year 1908-09, when the Corporation was made solely responsible for primary education of the city under the Police Charges Act, 1907. The table is worth reproducing here.

Year.	Number of Schools.	Number of Pupils Municipal.	Total number of pupils Municipal and sided.	Expenditure Rs.
1908-09	102	10,314	21,452	2,54,888
1909-10	114	11,559	23,014	2,88,202
1910-11	127	13,255	24,916	3,30,890
1911-12	142	15,861	29,482	3,38,263
1912-13	160	16,746	30,767	3,78,088
1913-14	174	18,846	33,628	4,37,815
1914-15	179	18,046	32,404	4,77,875
1915-16	183	21,669	87,205	5,02,173

During the year under review the number of schools increased by four only, a number much smaller than in any year since 1908-09. In fact during the last 2 years the total increase in the number of schools has been only 9, against the annual increase of 14, 18, 15, 13 and 12 schools in five years preceding. The increase in the number of schools, therefore, in the year 1915-16 has not been satisfactory. Nor does the progress of Education appear at all satisfactory, when measured by the increase in the number of pupils. The "Very satisfactory increase of 20%," mentioned in the Report, is misleading inasmuch as a heavy discount has to be made from this seemingly large increase by the fact that, on account of the war panic, the number of pupils had at the end of 1914-15 gone lower than the figure of 1913-14 by 800 To gauge the real increase, therefore, we must take figures for the last two years together, and when we do so, it will be found that the net increase on the figure at the end of 1913-14 is only 2823, or 15% in two years, or 71% in one year. when we compare it with the percentages of increase in past years. which are 14.7°/, for 1910-11, 19.7°/, for 1911-12, or 12.5°/, for 1913-14 we see how little ground it affords for the attitude of snug self-complacent which the report assumes towards the expansion of education in Bombay's If the present pace of progress is continued and neither hastened nor slackened it will be 36 years more or 1952 A. D. before all the children of school-age at that time at the lowest estimate are at school. Surely we cannot afford to wait so long before our goal of universal education is reached.

COMPARISON WITH OTHER CITIES.

No doubt the progress during the last seven years has been fair and the Increase of 81 schools and the doubling of number of pupils have been achieved. The fact considered by itself and independently of the circumstances that existed seven years ago and also of the large increase in the number of pupils that must still take place before a decent percentage of children of school-age in the city is at school, gives one some reason to be proud of. Seven years ago the number of children attending Municipal schools was only a little above 1% of the population, and even now it is only 2.2. If we include the figure of children attending aided recognised schools, the percentage at this day works to 3. 8 only. But similar percentage of children attending Municipal and aided schools for the various cities in this presidency named below at the end of the year 1914-15 is much higher, as can be easily seen, than the percentage for Bombay viz. 3. 8. It is useless to compare figures of Bombay to those of India as a whole as was recently done in the Corporation during the recent debate. The conditions of purely urban and industrial Bombay and of almost wholly rural and agricultural India with many backward portions, are quite dissimilar.

City.	Population as per Census of 1911.	Number of children in Municipal, aided and recognised schools on 31st March 1915.	Percentage of children at school to total population as per 1911 census.
Bombay (on 31st March 1916).	9,79,500	21,669 15,536	3⋅8
Abmedabad	2,16,800	10,688	4.7
Karachi	1,51,900	9,248	6-1
Poona (city and subarb)	1,26,630	13,217	10-4
Surat	1,14,868	7,989	6.9

TOTAL ANNUAL EXPENDITURE.

The annual expenditure for primary education has increased during the last seven years from a little under three lakhs to a little over five lakhs. This is good, no doubt, as far as it goes; but the plain fact must be recognised that ever since the eighties of the last century to the present day the Corporation or the Government and the Corporation combined, has never spent

enough for primary education in Bombay. The representative of citizens of Ahmedabad said in his evidence before the Education Commission of 1882 that the Bombay Town Council, as the Municipal Body was then called, spent only 1% of its revenue for primay education, while they in Ahmedabad then spent 2%. In 1939-10 the expenditure on education came up to as much as Rs. 2,88,000 which works to only 2.57% of the revenue of that year, a very meagre percentage. In 1915-16 the expenditure on schools, which is Rs. 5,02,000 works to less than 4% of the total revenue of the year. This expenditure of 4% of the total Municipal income cannot be considered liberal, more so in comparison with the average mofuscil muincipalities which spent 15% of its income in 1913-14 nor in comparison with expenditure incurred on other branches of Municipal work in this city as given below:—

Debt (interest and sinking fund on)	30°/, of total revenue.
Public Works Dept. including water works.	24% of total revenue.
Public Health Dept.	18% of total revenue.
Contribution to Improvement Trust	8%, ,, ,,
Education.	40/0 " " "
Medical Relief.	310/0 ,, ,,
Assessment & collection Department.	310/0 ,, ,, ,,
General Superintendence.	210/2 ,, ,,
Fire Brigade.	14%, 31, 12
Miscellaneous Depts.	54%, ,, ,,

As seen above for every rupes spent on education we pay 2 to the Improvement Trust, spend 4½ for the upkeep of the Health Department, spend 6 for the maintenance of our roads, buildings, drains, and water-works and have to pay 7½ for interest on loans taken and for their sinking fund. As remarked in the Corporation on 26th June last "while the schools committee were sleeping the doctors (i. e. the Health Department) had captured large sums from the Corporation." Education ought to get at least double of what it is now getting. Ten lakhs a year, by increments of one lakh a year for five years, would not be a very liberal expenditure for the city. Even for this sum only half the number of children, or 50,000 in all can be educated in Municipal schools, because the average cost per pupil is about Rs. 20 per annum. The Committee should adopt the policy of "Knock and thou shalt be received" for getting more funds from the Corporation. It is the business of the committee to awaken the interest of Corporators in education work in case they are apathetic to it. It was only once in a way while framing the budget for

1915-16 that the committee got Rs. 30,000 less than it wanted and that too for a reason partly justifiable. The Corporation is not and cannot be so indifferent to the committee's recommendations as to refuse more money if asked year after year.

TRAINED TEACHERS.

In the absence of a Training College or Normal School in Bombay teachers are sent to Ahmedabad and Poona with stipends for being trained. 59 teachers were thus under training during the year. Moreover, the committee opened one Gujarati (for men) and two Urdu (for men and women) classes for training teachers and preparing them for the Training College Entrance and First Year Certificate examinations. As the joint result of efforts mentioned above, there was a net addition to the staff of 54 trained teachers (from 286 to 340). During the previous year there was a net addition of 29 only (from 257 to 286), so the addition during the year under review was almost double that in the previous year.

The percentage of trained teachers to all teachers in Bombay Schools is 40.7 in the case of men teachers and 47.4 in the case of women teachers. Working from figures given in the table on page 13 of the Supplement to the Director of Public Instruction's report for 1914-15 it is found that the percentage of trained teachers in all Municipal Schools in the Presidency is 42.3 for men teachers and 47.7 for women teachers. Thus Bombay is not at least behind, if not ahead of, the average mofussil Municipality in this respect. But to have a good supply of trained teachers to staff scores of new schools that must be opened in the near future it is necessary to have our own Fraining Colleges. This question must be faced sooner or later and cannot be woided very long.

OPENING MORE SCHOOLS.

But the question of the provision of trained teachers is often trotted out as an excuse for the slow rate of the expansion of education. As it is true that the number of trained teachers is restricted by the small number of Training Colleges in the Presidency and the number of stipends offered to students, so it is true that a fair proportion of trained teachers is not obtainable, because good wages are not offered to persons of that class. A trained teacher is not a rare bird and one that finds no attraction in Bombay. Being attracted by remunerative private tuitions, they come to Bombay in good numbers and if encouraged by better salary from the Committees, they will come in large numbers to Municipal Schools. It is a question of supply and demand and higher wages must be offered to attract larger number. And after all the

dearth of such men need not prevent the Committee from opening more schools, provided funds are forthcoming for the same. No body would seriously contend at this day that because in Urdu schools in Bombay the proportion of trained teachers to all teachers is 1 to 9, these 50 schools ought not to have been started at all. I am one of those who believe that indifferent education is better than no education, as feeding a famine-striken man on one meal of coarse jowari or barley is better than letting him starve to death in the absence of rich dishes.

In October last year the Schools Committee disposed of 17 applications for new schools from different quarters of the town, declining to comply with the request of any of the applicants. The matter was reported to the Corporation in the ordinary course, and recorded without any discussion. The Corporation as a body devotes more time to matters of much less importance than education. The Hon. Sir Ibrahim very correctly described on 6th July last the apathy of our corporators during the recent famous debate on education in the following words. "The Corporation has the power of reconstituting the Committee every year and how had they exercised it? They have not only never cared to read the excerpts sent to them regularly every month, but they have reelected the same members year after year. It was absolutely in the hands of the Corporation to see that the work was properly done and why had not this been done? If the Corporation were not satisfied they could have passed a vote of censure on the Schools Committee and forced them to resign." When the papers regarding the 17 applications were before the Corporation, surely any member could have stood up and asked the Corporatian to resolve to send the matter back to the Committee recommending it to open at least a few schools if not all the 17 on the list. But we have never heard of a case in the annels of our Corporation where discussion ever took place on the monthly excerpts of the Schools Committee:

A few cases of new schools asked for may be mentioned here to show the urgency of the demand. Walkeshwar wanted a Marathi girls' school badly, as many girls attend the boys' school, and the number of girlsis thereby restricted. Residents of the congested portion of the Fort applied for a Gujarati girls' school and were not given a favourable reply. However, I am informed, that the Committee are now arranging to open a Girls' School there. At Wadi Bunder an Urdu Girls' School was demanded, as no less than 60 girls attend the boys' school, but the application was refused. Can there be cases stronger than these? Sion and Matunga each required a Marathi Boys' School, but were refused. All the three applications of Gujarati sweepers from (1) Karwar Street in the Fort, (2) Sukhlaji Street and (3) Parel Bhoiwada, were not complied with. Could not a representative of any of the wards, from which

the demands were forthcoming, have got up in the Corporation and said that the demand was real, that he had personally inquired into the alleged want and it should be complied with by the Committee? No, perhaps they thought that it was the Schools Committee's work and not of the Corporators', as if the Committee was a body quite independent of and unconnected with the Corporators, and that they had no business to interfere in educational matters. As Sir Ibrahim said "If the Corporation would take more interest in the work of Schools Committee as well as in the question of primary education by discussing the monthly excerpts, it would be a great advantage to them and there would be greater progress in primary education".

CONSTITUTION OF THE SCHOOLS COMMITTEE.

Eight members of the Corporation sit on this Committee. The members are re-elected annually by statute. Only two most senior out of the 8 permanent members retire every year, but even these two may be re-elected. The schools committee requires more new blood. At least 4 members should be made to compulsorily retire every year. Moreover those members of the Corporation who are either educationists or take much interest in the spread and improvement of education should sit on this committee. Unfortunately, the school-master rarely finds a place in our Corporation. The school-master is elbowed out by lawyers and doctors and he rarely offers himself and he never finds himself nominated with the result that there is no educationist in the real sense of the word, on this committee. The Corporation should ask for powers to appoint outsiders on the Committee. The veteran politicians sitting on this Committee will hardly be finding time to attend to this comparatively less important work. They, in a body, are able to devote only six hours in a year to the question and naturally cannot spare more time for this work.

Meetings of the committee which take place not more than once a month, should be made open to the public and the Press, like those of the standing Committee, and the deliberations should be made known to the public. At present the public knows very little of what takes place in these meetings. It is only when the Committee's Resolutions are submitted to the Corporation for information that the public gets to know (and only those who can get at the agenda papers of the Corporation) what the Committee has resolved upon about two months before. In order to invite the active sympathy and co-operation of the educated public, it is necessary that the deliberations of this Committee should be widely known through the medium of our daily English and vernacular papers. Also quarterly or even monthly reports of attendance at schools, opening of new schools, change of location to

better buildings and such matters of public importance may be published as is done by Health Department week after week.

The report for 1915-16 was submitted by the secretary of the schools Committee on 12th June last, yet it was not laid before the Corporation nor before the public upto the beginning of this month (August), when it appeared in the agenda papers of the Corporation. Had it appeared by the middle of June last the discussion in the Corporation that took place in June and July would have been greatly faciliated and the public would have been then able to gauge the progress made during the last official year. In short, more light is required to be thrown on the working of the Committee in view of the growing importance of the subject and of the interest that public in general takes in this part of Municipal work.

THE EXECUTIVE.

The Chief Executive officer is the Secretary of the Committee and he does daty also as the Chief Inspector or Superintendent of all schools. He is assisted in his inspection work by three superintendents, one each on Marathi, Gujarati and Urdu sides. Pupils in Marathi schools number a little over 12,000, in Gujarati schools about 5,500 and in Urdu Schools 4,000. The rule in the Government Education Department is to engage one Inspector to every 5,000 children. According to this standard the number of 3 superintendents for three sides and one assistant for Marathi side is not too liberal. The provision of two female assistants for inspecting about 2800 girls in Marathi schools and about 1900 in Gujarati schools will have to be made in the near future.

THE DUTY OF THE CORPORATION.

Under the City of Bombay Municipal Act it is incumbent on the Corporation to make adequate provision for "maintaining, aiding and suitably accommodating Schools for primary education." The clause is very comprehensive and we can expect it to be interpretted fairly, if not liberally, by the City Fathers. In the first place primary education must be provided not only in all the languages of the sons of the soil, if old inhabitants of Bombay may be so called, but they should also teach in the languages of the immigrants, whose numbers be not small. In the second place, it is not to children alone that the three R's should be taught, but they should be taught to adults, men and wemen also, who had not the good fortune to receive in their young days the minimum of education. They, the artizan, the mechanic, the washerman, the should be taught in all the labouring class men, should be taught in night classes. Adult women should be taught in the after-noon special

classes, say from 1 to 4 p. m. There is a great demand for such night and afternoon classes. A scrutiny of private educational institutions of a philanthropic character housed, in case of some night classes, in Municipal schools and of afternoon women's classes elsewhere, will convince any one of the great demand for classes for adults. The Corporation has practically not yet attended to this portion of its duty and the sooner it does the better for the advancement of the city.

NOT A SINGLE SCHOOL FOR HINDI.

The following figures are taken from the 1911 census report showing the approximate number of pepole speaking the principal vernaculars and the percentage they form of the total population of the city.

(1)	Marathi.	5,25,000	54°/。
(2)	Gujarati and Cutchi.	2,46,000	25½°/。
(3)	Hindustani.	81,000	84.\°
(4)	Western Hindi.	64,000	6¼°/。
(5)	Rajasthani. (Marwadi)	8,000	1°/.
(6)	Telaga.	8,000	1°/。
(7)	Tamil.	3,000	1°/₃ →
(8)	Arabic.	3,000	1 °/。
(8)	Persian.	2,800	1°/.
(10)	Kanarese.	2,000	1° /°

We have got Municipal Schools teaching the Marathi, Gujarati, and Urdu (Mahomedan Hindustani) languages only. There is absolutely not a single school for Hindu Hindustani or Hindi, as it is called and which is spoken by over 9% of the population or about a lakh of people. There is besides no provision for teaching Telugu, Tamil, Arabic, Persian or Kanarese. The absence of Hindi schools has forced the Marwadi community which has Hindi as their written language, to open their own boys' and girls' schools and philanthropic societies to open Hindi Night Classes for the U. P. immigrants working as our milkmen, choukidars and tramway and telephone companies' employees. The schools committee's attention has been drawn to this great need on and off for the last two years without any result. A Christian Mission has opened a Tamil school for the children of leather-workers of Dharavi, but our Schools Committee will not go out of its orbit of the three languages. There is no Hindi speaking member on the Corporation to agitate for the removal of this grievance of a large portion of the population. When such an important section as Hindi, numbering about one lakh, is neglected it is

futile to expect schools for Telugu, Tamil, Arabic, Persian and Kanarese speaking pepole, numbering a few thousands each.

PRIVATE UNRECOGNIZED SCHOOLS.

It is strange that the Committee has not been able to find out in the whole city any private school teaching any other language than Marathi, Gujrati and Urdoo. Appendix E of the report gives a rough estimate of the number and attendance in unrecognized and unaided primary schools in Bombay. It gives the number of Marathi, Gujrati and Urdoo schools of this description as 28, 50 and 110 respectively but fails to make a mention of the schools teaching any other languages. It takes no cognizance of the school known as Marwadi Vidyalaya, a palatial building opened by H. E. the Governor about a year ago, nor of Hindi Night schools using municipal buildings.

In this connection is it too much to ask the Committee in charge of schools to keep a reliable record of the number of such private unrecognized schools in the city and of attendance thereat, by engaging a clerk or two or other staff specially for this purpose? Instead of getting as at present, a "rough estimate" of the number of and attendance at such schools, we shall get correct and reliable figures. A knowedge of the exact location and condition of such private schools and of their teaching efficiency will guide the Committee in selecting sites for new schools under the more efficient Municipal Agency. A correct list of such schools with as many details as can be got, can thus be made out and revised once or twice every year, and the small time and money spent on such lists will be very well spent.

SCHOOL-AGE CHILDREN.

What percentage of the total population of a town or country should be taken as school-age population is a debated question. This percentage depends upon the age-period of children and youths which is taken as school-age. The Government Education Department assumes the school-age population at 15°/, of the total population and justifies this assumption on the ground that 5 to 6 years is the period for primary education and that the age period from the end of the bth year to the end of the 11th and 12th year had 13. 7 and 16°/, of the population respectively in the case of India as per Census of 1911. (Vide Quinquennial Review of Indian Education 1907 - 12 page 15.) On the other hand several writers consider this percentage of 15 as quite arbitrary and a gross underestimate. They quote figures of the percentage of pupils learning in elementary schools in several countries of Europe, America and in Japan which are actually between 15 and 25. This may be so, because of the longer period of elementary education in those countries than in India. In India 5 or 6 years.

are considered as a sufficienty long period for primary education, while in the countries of Europe and America the period of elementary education is rarely less than 6 and usually 8 years and some times longer. At any rate the conventional figure of 15 for primary school-age population is adopted by the Government as the figure for all school-age population (i.e. boys and girls reading from infant class to the University degree) without any justification or explanation whatsoever and does not stand to reason in as much as the figure of 15 is incorrect and misleading. But this is a digression.

In the city of Bombay the primary course usually does not extend beyond 5 years. Only three schools out of 136 boys' schools in Bombay teach anything beyond the 5 years' course. No doubt, the number of higher primary schools should be more than the present number for various reasons. But a course of 6 years will be considered fairly long for children not wishing to go to an English school and wishing to settle in life early. The Census Report of 1911 for Bombay Town does not give the population separately of ages 5-6. 6-7, 7-8, 8-9, 9-10, 10-11, and 11-12, so as to enable us to find out the exact population of the age period 5-11 or 6-12. The figures given in the report for age 5 to 10 is 65, 854, and for age 10 to 15 is 76, 285. Working from these figures we see that the actual population of age 5 to 11 or 6 to 12 does not exceed 83, 200. On the other hand the Committee appointed by Government in 1906 to suggest measures for the further spread of primary education reported in para 6 of their report dated September 1908 that the total population of school-going age is 1,11,136. Further the Secretary of that Committee Mr. R. S. Taki, (late Deputy Educational Inspector, Bombay) put down the figure according to the Census of 1906, exclusive of European and Eurasian children and those in the harbour, docks &c. at about 1.05.000. Perhaps the truth lies somewhere between the two figures of 83,200 and 1,11,136. It would not be far from the mark if it is assumed at one lakh. until more reliable figures are produced, or until the Schools Committee makes a fairly reliable survey of education in the city as they did over twenty vears ago.

RECENT DEBATE IN THE CORPORATION.

In June last a resolution was moved in the Corporation to the effect that the state of primary education in Bombay was unsatisfactory and that the Schools Committee be asked to submit proposals for the immediate improvement of the same. There were some speeches severely criticizing the work of the schools Committee and others defending the position of the Committee and accusing the Corporation of being apathetic, as a whole, towards primary education and the Committee's work. The chairman of the

committee made a lucid speech showing forth the achievements or the committee during the last seven years and putting forth a pica for education by compulsion. Putting the case in a nutshell the Committee's case was like this. "You do not give us more money, do not take interest in the work entrusted to us, still how is it that you accuse us of neglecting our charge? Within the means placed at our disposal we do educate as many children of the city as best we can. If you want more children to be instructed and in a better way give us more money and we shall try our best in proportion to the amount of money granted." But the chairman frankly admitted "the pace of progress should be further accelerated " and that " it is very desirable to spend more if your finances permit." Sir Ibrahim took the Corporation to task for not taking any interest in the Cmmittee's work and while giving an account of education of 56,000 boys, forgot to give any account of education of 56,000 girls. Mr. Wacha summed up the case for the Committee and said the following words. "He was proud to say that the schools Committee's work was very good and that it did not matter how much abuse they showered on it." The members of the Corporation who were not members of the Committee and who were not in favour of Mr. Baptista's proposed vote of censure on the Committee, had no answer to give to Sir Ibrahim's counter charge and they did wise in passing though by a small majority Hon. Mr. Setalvad's amendment which was in effect the same as Mr. Baptista's proposal minus the condemnatory portion of it. If the Committee and the Corroration after this lively debate put more money and more energy into education work they will have done their duty better than now to the illiterate section of this city. It is hoped that the Schools Committee will submit their proposals without loss of much time say, by the end of the year, and that the Corporation will not be tardy in voting more funds. The Committee of 1909 (which included the Schools Committee) appointed by the Corporation for the purpose of reporting on the whole question of extension of primary education in Bombay has not yet, after the lapse of 74 years, submitted its report. Let us hope that the Schools Committee will this time be more alert and submit its report in as many months at the most as it has taken the larger Committee years.

WANTED A POLICY AND A PROGRAMME.

What is urgently needed at the present day is a bold and settled policy for the further extension of education and of making it almost universal. The present drift policy of resting content with a small annual advance in numbers and expenditure must be changed for a bold one of large strides and liberal expenditure. From four percent of revenue being voted to education we must advance to eight percent in the course of four or five years. From

183 schools we must advance to about 400 schools and from 21,700 children in Municipal schools we must make a forward move to 40,000. Let missionaries of education be engaged and sent round in nooks and corners of the city to find ont and persuade parents of illiterate children. For obtaining more trained teachers the Committee should make up its mind to open more higher primary schools and open full normal schools or training colleges, granting their own certificates, if needed. The housing difficulty can be got over by negotiating with houseowners and inducing them to provide more light and ventilation in the existing buildings or adopting buildings under construction for school purposes by offering 5 to 10 years' or even longer leases. And this is within the power of the Corporation. The services of an engineer or surveyor may be placed at the Committee's disposal to look after the honsing of schools. Doctors and nurses must be engaged to look after the health of school children and of teachers, and philanthropic societies should he asked to co-operate, at least be encouraged to take up the question of feeding children during the mid-day rest. The Government Committee of 1908 recommended opening of 555 new schools, and of 122 urgently. It left the question of programme and of ways and means to the Corporation. Let this programme be made out even at this late day and money provided to enable its being followed closely. If necessary, local taxation may be raised by \$ % and that will bring in additional 21 lakhs, which can be earmarked for education, as \$\circ^0/_0\$ tax is earmarked for firebrigade. Let not the fair title of Urbs Prima in Indis be challenged every now and then on this question, which is crying for solution. Then only can the Corporation go with a good claim to the Government asking for legislation to make education compulsory and free.

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AUSTRALASIA FOR PUBLIC SCHOOL BOYS ADVICE TO PARENTS

By F. A. W. GISBORNE

(A Colonist of Twenty-Five Years' Standing)

As an old English Public School boy, who went out to the Antipodes at the age of nineteen, and has resided there for a quarter of a century, I should like to add a few observations to the article by Dr. Richard Arthur, which recently appeared in The Empire Review under the above title. At various times I have lived in all the States of the Commonwealth, and beginning as "jackeroo," or pastoral apprentice on a cattle station, have filled in succession the posts of stockman, drover, station manager, land selector and farmer, prospector and miner. I may therefore claim to speak with knowledge founded on considerable experience.

Let me offer at first a little negative advice. It is, or used to be, the habit of many Australian squatters to advertise for cadets in leading English newspapers, promising for the young men entrusted to their care every advantage from good shooting to assured fortunes. "Once bit, twice shy" runs the familiar saying. I was severely bitten and wish to impart my shyness as regards these seductive invitations to all who may be disposed to yield to their allurements. I would urge the solicitous parent, or the adventurous schoolboy, to look on the advertising colonial pastoralist with the same eye of caution with which a prudent invalid would regard the advertising physician. Far better obtain an introduction through a friend in the colonies, or some commercial or banking house with colonial connections. Good wine, we all know, needs no bush. The good squatter with a vacancy for a cadet has no need to advertise; plenty of young men are always anxious to step into the coveted position.

The quack pasteralist or farmer usually demands substantial payment for the services he promises to render. Tom Brown, late of Eton, must not expect to become an Australian Jacob or

Tyson for nothing. A yearly premium ranging in amount from £100 to £200 per annum is generally demanded by the disinterested tutor. I have no hesitation in saying to the parent—pay nothing: your son, if he be good for anything, will more than recompense the owner of the estate to which he is attached by the services which he renders for the trifling cost of his maintenance. If a yearly premium be paid, it becomes the direct interest of the host to retain his profitable guest as long as possible. This he will do usually by treating him frankly as a paying guest; by pursuing a policy of courteous discouragement in regard to serious business; and by inciting the youthful stranger solely to enjoy himself. I have known many young men so treated. They are well lodged, well fed, and well treated; but unlike young Warren Hastings they are not well taught. Horses are placed at their disposal; they career about the bush, hunt kangaroo, visit their friends at neighbouring stations, shoot an unlimited number of wild duck, and occasionally appear on a cattle camp to enjoy the novel spectacle of men riding for purposes other than those of recreation. But their entire want of skill in the somewhat difficult art of cutting out, drafting and branding cattle causes them to be regarded as unwelcome visitors at the cattle camp and the stockyard.

A tactful owner or manager, as soon as "Johnny Raw" (as the young scion of perhaps a highly aristocratic English family is disrespectfully styled by the rude colonial bushman) appears on the scene where important operations have to be carried out, will courteously rid himself of the troublesome intruder by dropping a discreet remark as to the abundance of game to be found at a lagoon a mile or so distant, and send him off, literally, on a wild goose chase. Policy of the kind outlined . has the double advantage of making the new chum contented, and at the same time keeping him ignorant; so that his period of education-and contribution to the squatter's income-become abnormally prolonged. Sometimes the 'young Englishman remains for years on the station without learning the merest rudiments of his new trade. He becomes a good rider and a good shot; but his knowledge of practical station management is so small that he could not undertake the charge of the smallest property with any chance of success.

In other cases, an astute bush mentor adopts a different course in dealing with his cadets. The father, perhaps, in a fashion not uncommon among people who have been well fed and luxuriously housed all their lives, has expressed a wish that his son should be required to "rough it," an excellent thing, many of his class consider—for others. The squatter is determined to follow the instructions given. The young men are set to do

manual work of the humblest description. In their innocence they exult in the thought that they are gaining "colonial experience." I remember the case of two youths fresh from home, each paying £150 a year for his education, being engaged for months solely in the very arduous though simple occupation of felling scrub. They became, it is true, accomplished axemen; but the art might have been acquired at somewhat less cost. As a matter of fact they were saving their employer about 30s. a week each, and enabling him to clear money as well as land—a singularly profitable combination. Of course "jackeroos" of the greatest simplicity would not be content indefinitely to follow this primitive course of studies; so, to vary the curriculum, after a paddock had been cleared, the fence might be mended or renewed, or odd stumps grubbed out. Plenty of work of a rude kind can always be provided on a station, and a new chum with a turn for carpentering is a treasure.

"Colonial experience" is a term that embraces a multitude of occupations. By a simple illusion some people seem to think that a boy swinging an axe or riding a horse in Australia is progressing rapidly along the path of knowledge; whereas so engaged at home he would be but wasting time. The phrase "roughing it" has attractions for certain comfortable folk in England. That John should sit indoors with wet boots on while at home would throw his parents into paroxysms of anxiety. But when transferred to Australia they read with feelings of gratified pride that, caught in wet weather while travelling with cattle, the young colonist has lived in wet clothes for a full week; or, by faulty commissariat arrangements, has been reduced for some days to a Tartar diet of beef or mutton. The Artful Dodger of the Australian bush quite understands these idiosyncrasies, and provides the youthful cadet with an amount of hardship and mild adventure just sufficient to gratify his self-conceit and afford pleasing thrills to his friends at home.

The non-paying cadet on a farm or station managed by a thoroughly capable man, one of those sympathetic disciplinarians who are by no means uncommon, has by far the best prospect of ultimate success. He is not allowed to be an idler, and, recognising the fact that a trained assistant is the most profitable assistant, his superior does his best to make him thoroughly conversant with all the details of the work carried on. If provided with capital the young man, after a three-years' course of training, should be able to obtain a farm or station for himself. Otherwise he must be content to look out for a position as manager. In regard to the pastoral calling, however, it were as well to mention that good salaried positions are by no means plentiful, or easy to obtain. Station managers, as a class, are

but poorly paid; and native-born Australians, accustomed from their infancy to local conditions and occupations, have a far better chance of supplying vacancies as they arise than the most energetic and resourceful product of the English public school. Indeed, I should feel strongly inclined to dissuade any English parent who could not afford to furnish his son with capital to the extent of £2,000 from apprenticing him to a pastoralist with a view to becoming one himself later. Pastoral properties are usually expensive in Australia, and a sum—say £1,000—which would be amply sufficient to start a competent youth, after a fair course of training, as a farmer would be hopelessly inadequate to enable him to become a successful grazier. Small capitalists had better adopt agriculture in Australia as a means of livelihood.

Dr. Arthur's remarks on institutions such as the Hawksbury Agricultural College possess all the weight of admitted authority and deserve the full attention of English parents of the middle class who desire to convert their sons into flourishing colonial farmers. As one who has been engaged to some extent in agriculture both in Queensland and Tasmania, I entirely endorse his opinion that local experience is of more value to any one intending to farm out here than experience gained in England. I have now and then come across skilled English farmers on Australian bush farms, and have in most cases found them to be but indifferently successful. Their methods are too scientific and elaborate; they lack the gifts of rough and ready initiative, originality and resource which become inbred in the class of agricultural pioneers in Australia. I remember a squatter who indignantly dismissed a skilled English carpenter because he took some three days to. shape and fit a few rafters for a bush shed that he was told to put up. The poor man, by the laborious use of saw and plane, had transformed rough pieces of round timber into the most symmetrical forms, and had fitted them into their places with The idea of using round, more or less scientific accuracy. crooked, lengths merely barked and flattened at each extremity would have shocked him beyond expression. Later, no doubt he learnt that to succeed in Australia elegance must be sacrificed to utility.

The farmer, also, must not be too particular as regards appearance. A rough chock-and-log fence, the erection of which considerably helps to clear the land by the removal of charred pieces of timber littered about after the passage of the fire, is quite as durable and useful, though less neat in appearance than a trim post-and-rail fence, and is far cheaper. The rough cultivation of a considerable area of partly cleared land will yield more revenue than the intense culture of a small plot. In the early

days an immense amount of unnecessary expenditure was entailed on the first pioneers of Australian agriculture by the practice then in vogue of clearing land too thoroughly. Men spent sums varying from £16 to £40 an acre in removing every tree and stump from their paddocks preparatory to cultivation. Consequently the areas so cleared were but small (in parts of Tasmania trees over thirty feet in circumference at the base are by no means uncommon); for the labour involved was prodigious, and nature was not called on to do her share of the work.

Now time is utilised rather than money, only the undergrowth -bushes and saplings up to 18 inches in diameter-is cut down, and the large trees are ringbarked and left to decay. When felled, the large tree covers a great deal of space, will not burn while green, and is extremely difficult to remove; so long as it stands upright it is but little in the way. After a few months the felled scrub burns readily, grass seed is scattered over the ashes, and the first rain brings up a luxuriant growth of grass. While the trees and stumps dry and rot the settler can rear cattle, employing his spare time in fencing, picking up and burning the logs lying about, and gradually preparing the land for the plough. Rough methods of the kind described are both economic and effective. Heavily timbered forest land can be transformed into rich pasture for about £2 an acre, and the expenditure of a like amount distributed over the following five or six years will usually convert it into arable condition. Methods of rough culture alone are suitable for rough land, and these are best acquired on the spot. There is danger lest the English youth accustomed to all the facilities enjoyed on the English farm should plunge into ruinously expensive operations when transferred to an Australian bush holding. A thoroughly cleared and improved farm he might as well purchase in England as out here, for the difference in price would not be material.

There are many districts in Australia which offer magnificent opportunities to the pioneer farmer. In particular may be mentioned the extensive plateau drained by the Barron River in North Queensland. Hundreds of thousands of acres of land of incomparable fertility, level, well watered by rivers and creeks and enjoying a copious rainfall there await the enterprise of the settler. This region extending westwards from Cairns for from 30 to 40 miles lies some five degrees north of the tropic of Capricorn; but an elevation of nearly 4000 feet above sea-level permits the cultivation of sub-tropical and temperate products in close proximity to tropical markets. To illustrate the variety of products that can be produced in the district referred to I may mention that, some years ago, in the neighbourhood of the tin-

mining centre of Herberton, I saw both English and sweet potatoes, yams, tobacco, arrowroot, apples, pineapples, oranges, apricots, peaches, pumpkins, various vegetables of the ordinary English type, bananas, and even a small patch of sugar-cane all growing on one piece of land but a few acres in extent. Maize in particular does exceedingly well there, yielding up to 80 bushels an acre, and lucerne and other fodder plants flourish equally. For dairying and general agriculture the district could not be surpassed. In the centre of the same State, about 200 miles from Rockhampton, the tract of rich volcanic country known as the Peak Downs invites the labours of the agriculturist, and the well-known Darling Downs region in the south, now rapidly being brought under the plough by emigrant farmers from the southern States, has proved admirably adapted for wheat-growing, dairying, etc. Other highly inviting tracts of country in New South Wales, West Australia and elsewhere might also be mentioned.

Perhaps I may be permitted to conclude this article with a few general remarks in regard to the suitability of the ordinary course of training bestowed by an English public school as a preparation for life in the colonies. Of the beneficent influences on character exercised by the great educational establishments referred to there can be no question. Long may the English public school continue to be what it is to-day, the school of honour, courtesy, justice-"the nurse of manly sentiment and heroic enterprise." In its moral aspects its praises cannot be too highly extolled. It has trained and nurtured thousands of the great statesmen; captains, and administrators by whose efforts Great. Britain has become truly great. But, from the utilitarian point of view, there are certain deficiencies which might well be remedied. A wise combination of the wholesome and lofty tone already attained with a scientific intellectual development, and a varied and useful practical training, would enable the public school to produce well-equipped pioneers of civilisation for new countries as well as able leaders for the old. I have never yet conversed with any man in the colonies educated at an English public school who did not deride the curriculum imposed on him in his early years, and who did not lament the utterly useless mental gymnastics he was then required to practise.

In common with myself all have found the dead languages a very poor instrument with which to make a living in Australia. To the man of a contemplative disposition, indeed, what is called a classical education often proves a grievous incubus. It creates a kind of mental fastidiousness which tends to isolation and discontent. Many a lonely fossicker and shepherd in Australia can quote Homer and Horace. Had these unfortunates entered the

country with minds unburdened by useless though costly adornments-had they simply mastered the essentials of learning and then undergone a thorough course of technical training—they would probably have become successful and happy men. The future colonist is sufficiently equipped intellectually if he possesses a fair knowledge of English, and, perhaps, either French or German, and enough geography and arithmetic to satisfy the ordinary requirements of life. Instead of wasting his time and mental energies over such futilities as verse-making in Greek and Latin, committing the Georgics to memory, preparing genealogical tables and elaborate maps, memorising long lists of dates, and learning the rather nauseous details of ancient mythology, the student would be far more profitably employed were he occupied in technical work of some useful description (a good carpenter or engineer is always sure of a living in the colonies), or given a practical training in some form of agriculture. A model farm with orchard and dairy under the supervision of experts would be a valuable adjunct to the public school. There might, in fact, be three distinct departments; one dedicated solely to the imparting of a purely literary training, one devoted to the technical arts. and one of the kind just indicated. Boys could thus be trained according to their natural aptitudes instead of being indiscriminately subjected to one course of treatment.

Reforms of the kind briefly outlined would in coming years greatly reduce the number of learned wastrels and drunkards now to be found scattered throughout the colonies. Men not suffering from the numbing effects of a classical education are the men Australia requires; the active faculties must be developed in order to fit youths for lives in countries where meditation is out of place, and where life is active and strenuous. Old learning is only adapted to old communities. The struggling pioneer enjoys but little leisure in Australia. When by dint of hard work he has won a competence or fortune, he can occupy himself with any kind of literary hobby he has a mind to. The wealthy, self-made squatter who sent an order to his Sydney agent for three tons of books showed a genuine, if naïve, craving for intellectual culture. By delaying its gratification he won the repose and material comforts necessary to the full enjoyment of the pleasures of the literary life.

Briefly summed up, the qualifications required by the English public school boy to fit him to become a good colonist are a good physique, a good character, and a good practical training either in some form of agriculture or a useful handicraft. While supplying the first two of these requirements the English public school fails lamentably in the third. No person who has studied the problem of education would desire to see the modern craze for

The Empire Review

uniformity extended to the management of the English public schools. But at the same time he cannot fail to see that an almost exclusive literary training cannot satisfy the needs, nor promote the future success, of the thousands of young men who, urged either by a spirit of enterprise or by actual necessity, leave the shores of the old world to seek their fortune in the new.

F. A. W. GISBORNE.

TASMANIA.

152

London County Council

THE ORGANISATION OF EDUCA-TION IN LONDON

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London County Council.

THE ORGANISATION OF EDUCATION IN LONDON.

HISTORICAL SUMMARY.

During the years previous to 1870 elementary education was, except so far as it was given in private schools, supplied mainly by the various religious organisations of the country. schools established by these organisations had, until 1832, to meet their expenses from voluntary contributions and from fees. In 1832, however, Parliament voted £20,000 for public education the first of the annual grants which have since been continued without interruption. At that time a State department for education did not exist, and for the first few years the annual grant was administered by the Treasury. It was applied solely to aid local effort in building schools and was distributed through the two great religious organisations —the National Society and the British and Foreign Schools Society. In 1839 the annual grant was increased to £30,000 and at the same time the duty of supervising its administration was entrusted to a special committee of the Privy Council established by an Order in Council. This committee was generally known as the Education Department. An approved building was at first the sole condition of aid, but the department gradually required other guarantees of efficiency, and the conditions of a grant were extended to cover successively teaching staff, attendance, and individual attainments. In recent years the grant has been given in block form for the efficiency of the instruction as a whole.

The efforts made by the religious organisations aided by the State proved inadequate, and in 1870 Parliament dealt with the subject of elementary education in the first great comprehensive measure. Under the Education Act of that year publicly elected bodies (School Boards) sprang into being in London and elsewhere. The School Boards were empowered to supplement the existing supply of elementary schools and to support from the rates the schools established for this purpose. Thus there arose two types of elementary schools—the voluntary schools of the religious organisations, and the Board schools of the publicly elected bodies. Each type was aided by the State and

each charged fees, but the Board schools alone were supported from the rates; the voluntary schools had to rely on voluntary contributions. To some extent the work of both types of schools was coordinated by the State Department of Education. In 1891 a further Parliamentary grant to all public elementary schools enabled the School Boards and also the voluntary managers to provide free education. In London the Board schools were made free, but the voluntary schools continued, in some cases, to charge reduced fees until 1905, when by the decision of the Council all fees were abolished.

In the domain of higher education also voluntary effort preceded the action of the State. Many of the Endowed Secondary Schools have existed for centuries. The Exhibition of 1851 led to parliamentary grants in aid of science and art classes. These grants were distributed by a second Department of State—the Science and Art Department. In 1889 local authorities (county and town councils) were empowered by Parliament to supply or aid the supply of technical education out of the rates; and in the following year Parliament relieved local rates by a large annual grant, giving at the same time power to the local authority to devote the whole or part in aid of technical instruction. The local councils construed technical education in a liberal sense and utilised the grant not only in supplying or aiding the supply of technical schools but also in providing means for science and art instruction and for aiding instruction in modern languages and other commercial subjects in secondary schools.

Thus there arose towards the close of the 19th century a complex educational system. One State department controlled elementary education; another aided secondary and technical schools. Elementary, schools were of two kinds: voluntary schools with insufficient funds, and Board schools maintained out of the rates. Further, while one set of local authorities (the county and town councils) were aiding secondary and technical education, another set (the School Boards) were in certain districts providing education of a higher kind beyond the limits of their powers. The time was, therefore, ripe for further Parliamentary action. Under an Act passed in 1899 the two State departments were merged in one central department, called the Board of Education; and thus unity was secured in the matter of State control. The Education Act of 1902, the second great comprehensive measure, introduced unity into local administration, and imposed on the local education authority the duty of maintaining the voluntary schools (except so far as the fabric is concerned) and of keeping them efficient. It has been followed by some important measures affecting the welfare of children, especially the Education (Provision of Meals) Act, 1906; The Education (Administrative Provisions) Act, 1907; and the Children Act, 1908.

THE LOCAL AUTHORITY.

The London County Council is the local authority responsible for all grades of education within the County of London. Practically the whole of the elementary education in London is under the Council's control. In the various branches of higher education the Council is associated with several other authorities, such as the University of London, the City Companies, the governing bodies of endowed secondary schools and the governing bodies of polytechnics and technical institutes. In the promotion of the different forms of education it is the object of the Council to work in co-operation with the other agencies that are engaged in educational work, and to secure that there is no overlapping or duplication of effort. The Council works throughout in close association with the Board of Education, which is the central authority entrusted by Parliament with the duty of supervising all branches of education throughout the country.

All matters relating to the exercise of the Council's powers under the Education Acts, except the power of raising a rate or borrowing money, stand referred by statute to the Education Committee of the Council; and the Council before exercising any such powers, unless in their opinion the matter is urgent, receives and considers the report of that Committee with respect to the matter in question. The Council may delegate to the Education Committee any of its powers under the Education Acts except the power of raising a rate or borrowing money. This Committee, whose meetings are open to the public and are held every Wednesday at the County Hall, is composed of fifty members (including nine women), of whom thirty-eight are members of the Council, and twelve co-opted members. The powers and duties of the Committee are distributed among nine sub-committees. It is assisted in the administration of elementary education by 181 statutory bodies of managers for provided schools, and 353 for non-provided schools, and in the management of its own secondary schools, training colleges, technical institutes and schools of art by advisory or local subcommittees. The Council also appoints representatives to serve upon the governing bodies of all schools and institutions to which it makes grants.

The Chairman of the Council is Mr. Edward White. Mr. Cyril Cobb is Chairman of the Education Committee.

The Council spends annually about six millions sterling on education—about £5,000,000 on elementary, and £1,000,000 on higher. As the receipts from Government grants amount to less than £1,750,000, an education rate of 1s. 9½d. in the pound has to be levied. The local education authority thus bears over 70 per cent. of the cost of education, the National Exchequer bearing less than 30 per cent.

The administrative staff in the Council's education service consists

of about 1,000 officers, including 96 inspectors. For purposes of higher education London is divided into four divisions, a divisional inspector being attached to each. For other purposes of educational administration London is divided into 12 districts, a district inspector being attached to each. With the district inspector is associated a divisional correspondent, who is mainly concerned with the meetings of school managers and local associations of care committees, and a divisional superintendent, who deals with the questions of school attendance, the employment of children, and the assessment of charges for meals and medical treatment.

ELEMENTARY EDUCATION.

As far as the actual management of the schools is concerned, there is, under the Education Acts of 1902 and 1903, a distinction between schools provided by the local education authority and those not so provided; but the same scale of salaries, and in most cases the same regulations, are in force in both types of schools. The schools which were formerly known as voluntary schools are now known as "non-provided" schools; since the buildings are provided by persons other than the local education authority, and the teachers in these schools are appointed by the managers (subject to the consent of the Council being obtained), but are paid out of the rates.

In non-provided schools religious instruction may be and usually is of a denominational character. In the schools provided by the Council the Bible is read, and there are given such explanations and such instruction therefrom in the principles of the Christian religion and of morality as are suited to the capacities of children, provided always that in such explanations and instruction the provisions of the Elementary Education Act, 1870, in sections vii. (relating to the conscience clause) and xiv. (relating to undenominational instruction) are strictly observed, both in letter and spirit, and that no attempt is made in any such schools to attach children to any particular denomination.

In London there are at present 545 provided or L.C.C. schools, with an accommodation for 589,906 children, and an average attendance of 517,482; and 364 non-provided schools, with accommodation for 158,725, and an average attendance of 139,777. In addition there are a few elementary schools which are not in receipt of Government grants and are outside the municipal administration. In a city so large as London there are naturally vast divergencies between the special requirements of the different districts, and the class and type of school varies accordingly.

The age of compulsory attendance at an ordinary elementary school in London is from 5 to 14. Children under 5, but over 3, may be admitted to school; children who are over 14 are allowed to stay on at school until

the close of the school year in which they attain the age of 15, but not beyond. During the past year the average attendance was 90°1 per cent. of the average roll. The 9'9 per cent. absent included scholars absent through illness or other unavoidable causes.

The attendance of children at school is enforced by the aid of personal visits paid to the homes of the children by 348 attendance officers. These officers work in close co-operation with the Council's teachers, and obtain from them, week by week, slips on which the attendances of each child are recorded. Whenever a child's record shows less than the full number of attendances (viz. ten) the case is investigated. All doubtful cases are at once visited and the visits usually produce the desired effect of securing regular attendance. Difficult cases are, however, brought before the local attendance committees, and, if necessary, dealt with by prosecution before a magistrate, who is authorised to impose a fine not exceeding 20s.

On first attending school a child is enrolled in the infants' department, and is drafted at about the age of 7 to the senior department. Senior departments are, as a rule, organised for boys and girls, but there are a certain number of mixed departments. As a rule, a department of a school does not accommodate more than 350 children, but there are some important exceptions. Non-provided schools are generally smaller than L.C.C. schools.

The size of rooms varies considerably, especially in the older schools, but under Article 14 of the Code of the Board of Education, no class may now have more than 60 on the roll. As regards the new schools, the Council has adopted the policy of restricting the accommodation of each classroom in senior departments to 40 and to 48 in infants' departments. The average number of children per class teacher throughout the service has been steadily decreasing of late years, and is now 397 for L.C.C. and 340 for non-provided schools.

The educational year in London schools has hitherto been from 1st August to 31st July. In 1911 and subsequent years the educational year for elementary schools will begin on 1st April and end on 31st March. One of the reasons which has led the Council to adopt this change is that it is found to be easier for boys and girls to find employment at Easter time than in the later summer. Another reason is that there is a great influx of young children to the schools in the spring and it is therefore convenient that the principal school promotions should take place in April.

In future, head teachers will, as a rule, carry out one other promotion and in some cases two other promotions in their schools during the year.

Subjects of Instruction.

The subjects of instruction, in addition to those usually found in public elementary schools, include elementary science, nature study domestic economy, manual training, physical exercises, organised games, and swimming. In certain cases modern languages are taken, but the teaching of this subject is, as a rule, confined to the higher grade and central schools.

Instruction in domestic economy and handicraft is provided at "centres." A "centre" is a specially constructed building, usually on the site of an elementary school, where instruction is given to pupils of that school and of neighbouring schools. In the case of domestic economy, accommodation for each of the three divisions (cookery, laundry, and housewifery) is, as far as possible, grouped, so that many centres consist of rooms for each of the three subjects, and instruction in the three subjects is, in these cases, made part of one organic whole-domestic economy. The regulations of the Board of Education allow 18 as the maximum number for a class. In the practical lessons girls are required to carry out the work themselves, and they do not work in pairs or groups, but singly. Girls are eligible for admission as soon as they are in "Standard VI." or on reaching the age of 12 years and 9 months, and it is intended that every girl should for two years spend one-half day per week at instruction in domestic economy. The syllabus of instruction varies with the needs of the district and is designed to bring the instruction in each case within the limits of the homes and the incomes of the parents of the children attending the schools. The arrangements for providing domestic economy instruction have recently undergone revision and certain experimental courses are being tried in some districts with a view to ascertaining which method of organising the instruction is best suited to the requirements of London girls.

As regards handicraft, all boys in "Standard VI." are eligible with the exception of those who are under II or too small to handle the tools. Boys over 12 but below "Standard VI." are also eligible. Over 90 per cent. of the necessary accommodation has already been provided. In the course of instruction, which follows a set of exercises in wood common to all centres, drawing and bench work are suitably combined. There are a few metal-work centres.

Nature Study occupies an important position in the school curriculum. Its aim is to evoke in the child a sympathetic interest in his natural surroundings. As the direct observation of animals, plants, and rocks in their natural environment is an essential feature of the subject so regarded, London schools are necessarily placed at a considerable disadvantage; but efforts of various kinds have been made to minimise this disadvantage and to encourage the introduction of Nature Study into the London schools. For instance, head teachers are allowed small sums of money for purchasing material to illustrate science and object lessons, and much of this money is devoted to the cultivation of plants

in the schools and playgrounds and the maintenance of small aquaria. Again a scheme has been organised under which surplus leaves, flowers, and cuttings and also growing plants from the Council's parks are sent in boxes to the schools. Although nearly 9,000 boxes, containing about 7½ millions specimens, are despatched to the schools during the year, the demand is considerably in excess of the supply at present available.

The tendency of the last few years has been to diminish the number of examinations imposed on the schools, and to give more freedom to teachers in framing their curricula.

Increasing attention is also now being given in the schools to physical exercises and organised games and also to visits to museums and places of educational interest, school journeys and other subjects tending to improve the physique or stimulate a wider range of interest in the pupils.

CHILDREN'S WELFARE

The school is the focus of much social activity. Play centres, vacation schools and happy evenings are provided by voluntary agencies, and assistance is given by the Council to these agencies under certain conditions.

An Association of Voluntary Workers, known as the Children's Country Holiday Fund Committee, sends into country homes annually about 40,000 of the children attending the elementary schools of London. The holiday extends over a fortnight, and usually falls within the period of the summer holidays granted to the elementary schools. Special arrangements are made by the Council, however, whereby, if so desired, this fortnight's holiday may be taken either immediately before or immediately following the school holidays. The parents of the children are expected to contribute, if possible, towards the cost of the holiday.

Much attention is given in the schools to medical inspection. A system of inspection had already been established before the passing of the Education (Administrative Provisions), Act, 1907. This Act imposed such inspection as a statutory duty upon local authorities, and the system has in consequence been considerably extended, so as to comply with the requirements of the Board of Education. Whenever the children are found to require medical attention, the parents are informed of the fact, and the Council has entered into arrangements with many of the London hospitals and certain associations of local doctors for providing medical treatment for school children who are suffering from ailments of the eyes, ears, nose and throat, and from ringworm. Arrangements for dental treatment have also been made with one hospital and with a Children's Health Centre. The Council is under statutory obligation to make a charge to the parents of any children for whom medical treatment is provided, but this charge may be remitted in necessitous

cases. The work of medical inspection is under the supervision of the Council's medical officer (Education), assisted by a staff of 4 full-time doctors, and roo quarter-time doctors, together with 89 school nurses. The arrangements for securing the attendance of the children at hospitals are made from the head office. In connection with this work the Council relies upon the active co-operation of the Children's Care (School) Committees to influence the parents to attend to the ailments of their children.

Under the Education (Provision of Meals) Act, 1906, the Council provides meals for those children who are found to be necessitous. Before the passing of this Act a certain number of meals were provided for school children by voluntary agencies. Since the Act came into force, however, it has been found impossible to provide sufficient meals from voluntary sources, and the Council now spends a total of about £90,000 a year in the provision of meals. The maximum number of children fed in any one week during the session 1909-10 was about 55,000. The number is considerably less during the spring, summer and autumn. Children who appear to the teacher to be necessitous are provided with meals as a matter of urgency, but careful enquiry is made into the home circumstances of the children before they are placed permanently on the list for the receipt of free meals. These enquiries are conducted by the Children's Care (School) Committees, one of which has been formed in connection with each school. These care committees are also required to keep a general supervision over the welfare of the children in the schools to which they are attached.

The names of those children in attendance at the schools who are not provided with boots or are insufficiently clothed are included in the list of "necessitous" children submitted to the Children's Care School Committees. The Committees, if satisfied as to the circumstances of the parents, endeavour to arrange for the provision of boots or clothing, either from articles supplied by charitable persons to the schools or from funds supplied locally. The Ragged School Union supplies boots to the Children's Care School Committees at half price.

The question of finding employment for children when they leave school is now receiving increasing attention. A committee known as the London Juvenile Advisory Committee has been established with a view of securing co-operation between the schools and the Juvenile Labour Exchanges. Local juvenile advisory committees have also been established in several areas. The principal part of the work, however, of guiding children into suitable employment has hitherto devolved upon the head teachers and the school care committees, who have devoted a large amount of attention to this important matter.

SUPPLY OF BOOKS, APPARATUS AND STATIONERY.

The books, apparatus, and stationery required for use in the schools and institutions of the Council are supplied from a central store in Clerkenwell. At fixed times requisitions are made by the principals or headmasters or mistresses for the books and materials required for the ensuing term. These requisitions are considered in connection with a graded scale of limits, the amount varying according to the percentage of children in the higher classes.

Requisition lists of suitable books, apparatus, and materials are issued and teachers have a free choice in their selection from these lists. In exceptional circumstances applications for books and materials not included in the approved requisition lists are considered by the Committee concerned. Separate requisition lists are issued for—(a) senior departments of day schools, (b) infants' departments, (c) special schools, (d) evening schools, (e) school lending libraries, (f) prizes for day schools, (g) prizes for evening schools, (h) science apparatus and material, and (i) casts, photographs and lithographs. Of these, (d) is supplementary to (a), and (g) to (f), while (h) and (i) are applicable to all schools where science and art are taught in special rooms provided for the purpose. There are also lists of science apparatus and material, and of framed pictures. The question of the formation of a separate list for teachers' reference libraries is at present under consideration. Every endeavour is made to bring the lists up to the most modern requirements, and to classify them systematically so as to make them a valuable educational guide to teachers. All new books, editions, and specimens submitted by publishers, or otherwise brought to the notice of the Committee, are fully considered, and account is taken of new movements and tendencies in the teaching of the various subjects of the school curriculum. Thus, in recent revisions of the English reading-books, many old-fashioned graded series have been removed (though the best have been retained), while large additions have been made to the "continuous readers," consisting of standard literary works. Similarly, in modern languages and in arithmetic, the recent additions include a number of books illustrating the new methods in the teaching of these subjects. In placing books upon the list the Council takes into account not only their literary merits, but their suitability in respect of type, illustrations and general format. room is set apart at the Education Offices for the exhibition of specimens of approved books and apparatus. These are open to the inspection of teachers and others interested in educational matters. A special library has also been formed at the Education Offices in order to assist in making educational books and publications available for members, officers and teachers.

CENTRAL SCHOOLS.

In addition to the ordinary elementary schools which supply the normal type of education, the Council has recently organised a certain number of central schools, with a view of providing for those boys and girls who are able to stay at school till over 15 an education which, while being general, will have a commercial or industrial bias. It is proposed that there should be about 60 departments organised on this basis and that they should, as far as practicable, be distributed uniformly throughout London. The pupils are to be selected from the ordinary schools when between the ages of 11 and 12 and they are to be chosen partly on the results of the competition for Junior County Scholarships and partly on the results of interviews with the head teachers and managers. A limited number of bursaries tenable from the age of 14 to the age of about 15½ are to be awarded to those pupils who need financial assistance to enable them to stay at school beyond 14.

These schools have taken the place of the higher grade and higher elementary schools which were established by the late authority. They are distinguished from the ordinary elementary schools by the fact that the pupils will be selected and will go through a complete 4 years' course with a special curriculum. They are distinguished from the secondary schools by the fact that they will be public elementary schools providing free education and that the curriculum will be framed with a view to enabling pupils leaving at the age of 15½ to be in a better position to earn their living.

The total number of central schools that have been organised up to the present is 39. Of these 13 have an industrial bias, 13 a commercial bias, and 13 both an industrial and commercial bias.

OPEN-AIR SCHOOLS AND PLAYGROUND CLASSES.

The Council has for the past few years conducted a few open-air schools in different districts of London. The following schools will be continued next session:—Birley House, Forest Hill, S.E., and Shrews bury House, Shooter's Hill. Birley House contains about 75 pupils (boys and girls) selected by the Council's Medical Officer from those children in neighbouring schools who appeared to be likely to derive benefit from the open-air treatment. A staff of head and 3 assistants is allowed to this school, and there are in addition a nurse, cook, cook's assistant and schoolkeeper. Shrewsbury House contains 100 pupils and has 4 assistant teachers and an extra cook's assistant. The school hours are from 9 a.m. to 6 p.m. (1 p.m. on Saturdays), and the pupils receive at the schools three meals a day. The physical condition of the scholars is kept under regular observation, and the results are carefully recorded. The teaching methods employed are in several respects different from those adopted in ordinary elementary schools, the open-air life rendering

such modifications both possible and desirable. Each school is under the direct observation of a specially chosen body of local managers who interest themselves in the progress of the pupils and the general arrangements of the institution. The schools are not kept open during the winter months. The reports upon the improvement that has taken place in the health of the children during the time when they are in attendance are very satisfactory.

The number of open-air schools is always likely to be quite limited in London, partly owing to the difficulty of securing sites and partly owing to the expense of maintenance. The Council has, therefore, recently devoted considerable attention to the organisation of playground classes in ordinary schools. These classes have proved to be extremely satisfactory, and during the year 1911 it is probable that as many as 50 classes will be at work, mostly in the profess and most crowded districts of London.

THE TEACHING STAFF.

The teaching staff for all kinds of schools numbers about 20,000. In the elementary schools of London there are about 16,460 permanent certificated teachers, of whom about 5,260 are men and about 11,200 are women. Of these about 13,200 (4,600 men and 8,600 women) have been trained, i.e., have been through a course at a training college. There are some 700 teachers in non-provided schools who are not certificated.

The salaries are:—Ordinary Elementary Schools—head masters, £150 to £400, head mistresses, £125 to £300, according to size of school; assistant masters, fully certificated, rise from £100 to £200, and assistant mistresses from £90 to £150. Central Schools—head masters, £200 rising by increments of £10 to £400, head mistresses, £150 rising by increments of £8 to £300 according to size of school; assistants, if required to produce special qualifications for teaching the subjects in the school course, receive £10 a year above the salary paid in ordinary schools, but with the same maxima. Teachers in schools situated in difficult neighbourhoods receive a special allowance of £7 10s. a year.

The salaries bill for teachers in elementary schools alone amounts to about £2,550,000 per annum. In the Council's own elementary schools there is one assistant teacher for every 45.7 children. Every decimal point by which this average is reduced means an increased annual expenditure of between £3,000 and £4,000. In order to meet the new demands of the Council's elementary school service and to replace teachers who leave the service through death, disablement or other causes the Council has hitherto formed each year a list of specially selected students who will be leaving training colleges in the summer. This list is known as "The List of First Appointments." The number to be placed on this list

is limited to 300, and as there is great competition to obtain a place on the list, the Council is able to select the best teachers for its service. During the currency of this list appointments may be filled by transfer of teachers from other schools or on the unattached staff. This staff is composed of persons who are in the permanent service but who are not at the moment attached to any particular school. It is only after the list in question has become exhausted that vacancies in the Council's schools have hitherto been thrown open to all candidates.

On the average, a teacher spends 17½ years in the service before being promoted to a head teachership. Some 80 head teacherships fall vacant every year and appointments to the posts are made almost without exception from within the service. Candidates for head teacherships, if within the service, must first be placed on the promotion list.

The promotion list is formed by the Committee after the fullest consultation with the managers and inspectors and after several hundred of the best qualified applicants have been interviewed by members of the Teaching Staff Sub-Committee and the principal officers. Men candidates for the promotion list must have had 10 years' experience in London schools, and women candidates 8. The promotion list continues in force for two years; at the end of that time a fresh list is formed.

It is, no doubt, inevitable that, amongst so large a staff of teachers, cases of inefficiency and of irregular conduct should occasionally arise; instances, for example, of proved professional incompetency or of such breaches of discipline as the infliction of some unauthorised form of punishment, or matters even more serious in character. Cases of this kind are, happily, rare in proportion to the number of teachers in the service. To secure the utmost fairness in the treatment of such cases, careful provision is made in the regulations of the Council for the thorough investigation of any charge against a teacher—by the managers of the school in the first instance, and, if necessary, by the Teaching Staff. Sub-Committee of the Education Committee and by the Education Committee itself successively. At every stage of the investigations the teacher concerned has the right to present his case, both orally and in writing, to produce witnesses on his behalf, and to cross-examine the witnesses on the other side. In any serious case which comes before the Teaching Staff Sub-Committee the teacher may be accompanied and assisted by a "friend," who is usually a colleague or a lawyer. In a grave case, if the teacher is in the direct employment of the Council, he has the right of appealing to the Council against the decision of the Education Committee. These regulations apply to teachers, lecturers and instructors in all the educational institutions maintained by the Council.

There is another aspect of a large teaching staff deserving of mention. viz, the use to which the expert knowledge of such a staff can be put by a local authority whose educational task is one of great magnitude. In connection with the establishment of the new Junior County Scholarship scheme in 1905, local scholarship committees, both of head masters and head mistresses, were organised in each electoral area, the committees including the head masters and head mistresses all public elementary and public secondary schools within the electoral area. These committees were found of great use in making suggestions with regard to the conduct of the exam-They were also utilised for the purpose of discussing questions connected with the transference of children in upper standards of ordinary elementary schools to the schools known as the higher grade or higher elementary. So useful did these committees appear that the Council decided to extend their sphere of operations and to utilise them for obtaining information and suggestions on various topics from those who were most closely in touch with the needs and requirements of the schools. Permanent committees were therefore established in each electoral area under the name of "Local Consultative Committees" of head masters and head mistresses. Each committee selects annually a chairman and an honorary secretary, and each local committee is summoned from time to time to discuss questions on which it is desired to obtain the suggestions of head teachers. The Chairmen of these "Local Consultative Committees" form the two "Central Consultative Committees" (head masters and head mistresses). The meetings of the Central Consultative Committees are summoned by the Education Officer, and are held once a quarter at the County Hall. They follow after the meetings of the Local Committees, and serve to focus the resolutions passed at the local meetings. By means of these Committees the Council is enabled to obtain the opinions of the teachers on various educational subjects which come before it for consideration.

In addition to this regular machinery for utilising the experience of teachers it has been found advisable from time to time to form conferences and committees of teachers to deal with special subjects or with such subjects as could not be submitted to large bodies until they had first been thoroughly threshed out by a smaller committee. Amongst these may be mentioned the following Conferences:—(1) On Co-operation between Public Libraries and Public Elementary Schools, (2) on the Teaching of English, (3) on the Teaching of Arithmetic, (4) on the Teaching of Geography, (5) on the Teaching of History. Conferences have also been held on Museum Specimens, on Drawing, on Manual Training, on Needlework, on Visits to Places of Educational Interest and the Curriculum of Training Colleges.

As a rule, the Conferences have been composed of elementary school

teachers, members of the staff of secondary schools and training co leges, inspectors, and experts in the subject under consideration. For example, at the Conference on Co-operation between Public Libraries and Schools six public librarians gave their services and their experience proved very valuable to the Conference in dealing with the compilation of a list of books suitable for school libraries. The Conference on Arithmetic, in addition to teachers of all classes, included mathematicians of the highest standing, who were not necessarily engaged in teaching. The Conference on English contained the names of men and women who were well known in the literary world; the Conference on Geography included some of the ablest and best known geographers in England, and the Conference on Drawing included members of the Royal Academy. Reports have already been issued by some of the The report on the Teaching of English attracted con-Conferences. siderable attention when it was published.

In addition to these conferences which meet to consider special subjects an annual conference of teachers is organised by the Council in January of each year for the purpose of bringing before teachers subjects of special interest. Papers on various educational subjects are read by representative members of the teaching profession or others connected with educational work, and each paper is followed by a discussion. The conference extends over three days and is largely attended by London teachers. The proceedings are published each year and circulated widely among teachers and others.

Superannuation of Teachers.

The new scheme of superannuation inaugurated by the Council for teachers in the London service, which came into operation on 1st April, iqii, provides a supplemental pension, partly to be paid for by the teachers and partly by the Council, for those teachers eligible to contribute to the Government Deferred Annuity Fund. This pension, together with that receivable from the Government Fund, will amount approximately to an allowance at the rate of one-sixtieth of the average annual amount on which the teacher shall have contributed to the fund for each year of contribution up to a maximum of forty-sixtieths. A portion of each teacher's salary is regarded as the basis of the Government pension scheme, and on the basis of the remaining portion the teacher contributes to a complementary scheme at rates varying according to the sex and the age of the teacher. To the fund thus formed the Council contributes sums equal to 3 per cent. of the total of the salaries on which contributions are paid, and guarantees interest at the rate of 31 per cent. on the fund, and also the solvency of the fund. In the event of a contributor dying while in the service, retiring through ill-health without having contributed for 10 years,

leaving the service owing to alterations or reductions in the staff, or being a woman, leaves the service to be married, an amount equal to the total of his or her contributions, together with compound interest at 3 per cent., is paid. Further, in the event of a pensioner dying or his superannuation allowance being otherwise discontinued (except by reason of his returning to the service), the amount, if any, by which his contributions with compound interest at 3 per cent., up to the date of retirement, exceed the pension payments already made is paid to him or his representative. Certain permanent full-time teachers in the Council's service, who are not eligible to contribute to the Deferred Annuity Fund contribute to the fund established by the general scheme. but their rates of contribution are based on the whole of their salary. and are somewhat less than those payable by teachers on the supplementary basis. The ultimate advantages derivable from the scheme by the two categories of teachers is approximately the same. appointed since the London County Council became the local education authority and before the new scheme came into operation (i.e., between 1st May, 1904, and 1st April, 1911) have been afforded the option of contributing as from the date of joining the Council's service. regards teachers who were in the service of the late authority, those who were not over 55 years on 1st May, 1904, are being allowed to contribute from that date, while those over 55 years on the 1st May, 1004 are being permitted to contribute from the date of attaining the age of 55 years. Payment of the back contributions thus accruing, if amounting to more than £5, may be spread over a period of 5, 10 or 15 years, by equal monthly or quarterly instalments of principal and interest (3½ per cent.) combined.

THE SCHOOLS FOR DEFECTIVE CHILDREN.

The London County Council makes special arrangements for the education of afflicted and sub-normal children.

(a) Schools for the Blind and Deaf.

With regard to the blind and deaf there is a special Act of Parliament which requires a school authority to provide instruction up to the age of 16 and, if necessary, to maintain these children in schools or institutions. The education is free, but a charge for maintenance is made to the parents according to their means.

There are, it is estimated, 365 blind and 666 deaf children of the elementary school class in London between the ages of 5 and 16. In a few instances the Council sends blind and deaf children to schools or institutions not under its own control. This is principally done in the case of Jewish or Roman Catholic pupils, or those children who are specially recommended for country or seaside institutions. The Council provides

for the remainder of the children in its own schools as follows:—6 day schools for the blind, 7 day schools for the deaf, 2 residential and day blind schools, and 3 residential and 6 day deaf schools, having a total accommodation of 307 for the blind and 639 for the deaf.

Between the ages of 5 and 13 blind or deaf children attend -mixed day schools, where the classes for the blind are organised for :15 pupils and those for the deaf for 10 pupils. A few blind or deaf children who live too far away from the schools to attend as day pupils, or whose home circumstances are undesirable, are boarded out by the Council with foster-parents in the neighbourhood of the schools. The instruction in the blind schools is given by means of Braille writing and reading, and the instruction in the deaf schools, except in the case of the defective deaf at the ·Homerton School, is on the oral system. The defective deaf, although they are encouraged to learn to speak, are also taught by means of finger alphabet, writing and simple signs. The elder pupils -those from 13 to 16—are taught in schools which are partly day and partly residential; the children who can conveniently attend from their own homes, and who have suitable homes, are day pupils, while those who come from a distance or from unsuitable homes are residential pupils. The instruction of the elder children, both blind and deaf, includes a large amount of manual work.

The manual and industrial teaching provided for these elder children has a strong trade bias, and it is found that many of them on leaving school are able to obtain employment at the trades which they have been taught in the schools. Separate classes are also being conducted as an experiment for children suffering from high myopia and for partially deaf children respectively. The myopic children attend the adjoining ordinary elementary school for instruction in certain subjects, the partially deaf children join the children of the ordinary school in the playground during recreation, and are encouraged to mix with the normal children rather than with the deaf. The gross annual average cost per head of children in the day schools for the blind and deaf for 1909-10, including the cost of the children boarded out, was £22 18s. 11d. and £23 11s. 11d. respectively, while the corresponding figures for the residential schools were \$53 155, 7d, and \$47 115, 6d. The Government grant of £5 5s. per child is divided into two parts, namely, £3 3s. for literary instruction and £2 2s. for manual instruction.

⁽b) Schools for the Mentally and Physically Defective.

The Council has also provided separate schools for both mentally defective and physically defective children. The schools are authorised by Act of Parliament, but the Local Education Authority is not compelled to make this special provision. There are under instruction about

6,889 mentally defective children, who are provided for in 91 day special schools, and about 2,706 physically defective and invalid children accommodated in 37 day special schools. The number of children taught by each teacher averages about 20.

Children are admitted to these schools on being medically certified as not imbecile on the one hand nor merely dull or backward on the other. In the words of the Act, they must be certified as being, "by reason of mental or physical defect, incapable of receiving proper benefit from the instruction in the ordinary public elementary schools, but not incapable, by reason of such defect, of receiving benefit from the instruction in special schools." The school curriculum is an adaptation of that in the ordinary elementary schools with a much larger proportion of manual work, nearly half the time being given to manual occupations. Art classes are carried on by special art teachers in the schools for physically defective children, and some of the pupils have proved very successful at this work.

Separate schools have been provided in 12 cases for elder mentally defective boys, where, in addition to the ordinary subjects of instruction, handicraft (woodwork and metalwork), shoemaking and tailoring are also taught. The Council has a home for mentally defective boys which is also certified under the Children Act, and to this school are sent some 32 of the most difficult cases. Three of the schools for physically defective children are carried on in hospitals for children, the Council providing the apparatus and teachers. Two separate schools have been provided for elder physically defective girls, in which, in addition to the ordinary subjects, trade needlework is taught with a view to providing the children with a means of livelihood on leaving school. The Council has recently opened, as an experiment, a school for tuberculous children, in premises in Harrow-road provided by the Paddington Dispensary for the Prevention of Consumption.

The Council deals specially with a few mentally defective children who on account of moral difficulties are found to be unfit for mixed schools, or who require custodial care. Twenty-seven such children have so far been sent by the Council to the Sandwell Hall Institution for the Mentally Defective, near Birmingham, established especially for such cases.

A voluntary committee arranges for the supply of meals in schools for the physically defective, but the general care of the children in these schools is undertaken by the managers. In the cases of schools for the blind, deaf and mentally defective, children's care (school) committees have been constituted under the Education (Provision of Meals) Act, 1906, as in the case of the ordinary elementary schools. Two voluntary committees, formed specially for the Council's special schools, undertake the after-care of children leaving these schools,

The Council has an arrangement with the authorities of the Heritage School of Arts and Crafts, Chailey, Sussex, for the reception of 24 physically defective children. The children sent to this school by the Council are selected from day schools for the physically defective, and are such as are suffering from an ailment which is not likely to improve unless they are removed from their present surroundings, and who show sufficient evidence of skill to be likely to profit by the teaching at Chailey.

Arrangements have also been made with the Chalfont, Lingfield, and Much Hadham epileptic colonies for the reception of London cases, and altogether 75 of the Council's children have passed through these institutions.

Public opinion has been much exercised regarding the education of mentally defective children; and important changes may follow the report of the Royal Commission on the Care and Control of the Feeble Minded, which was issued in July, 1908.

INDUSTRIAL SCHOOLS.

Industrial schools are intended for the reception of children under 14 years of age who by reason of their surroundings or of personal moral weakness are in danger of falling into crime. They are distinctly preventive, and not punitive in their character. The schools were formerly established under an Act passed in 1866, which described them as being schools "in which industrial training is provided and in which children are lodged, clothed and fed as well as taught." The present power to maintain such schools is given by the Children Act, 1908. Children must be committed by a magistrate and may be retained until they reach the age of 16 years, after which time the managers have powers of supervision for a further period of two years, with power of recall if necessary, except when children are committed for non-compliance with an order to attend an elementary school. Children are, however, usually licensed out at about the age of 15 years.

The Council has 8 institutions of its own, 7 residential industrial schools (including one in which places are reserved for truants) and I day industrial school. It also has contracts with about 60 industrial schools throughout the country to which it sends children. The total number of London cases dealt with since 1871 is 40,867, and the approximate yearly number sent during recent years has been 1,200.

The parents are required to contribute when possible towards the cost of maintenance.

The routine consists of schoolroom work and industrial occupation in equal proportions. Physical training and swimming receive considerable attention. The trades usually taught in boys' schools are tailoring, shoemaking, carpentry, farming, gardening, band-playing and in some

cases other trades such as printing, smithing, etc. A few of the institutions are either training ships or shore schools of a similar character, with facilities for boating and instruction in navigation.

On leaving the schools boys are usually placed in an occupation or trade for which they have been trained. A large number go to Army Bands and many others to skilled trades or farm service. Girls are trained in all branches of domestic work, and on leaving are usually placed in good situations as servants. Boys and girls are also sent out to Canada under the care of one of the recognised emigration societies, which places them in situations and supervises them until they reach the age of 18. The after-careers of industrial school children are in the great majority of cases satisfactory, and in some instances these children do exceptionally well, attaining such positions as Army Bandmasters, officers in the Mercantile Marine, farmers, managers of shops, skilled mechanics, etc. Out of 2,094 cases discharged during the three years ended 1908, 1,849 are known to be doing well in permanent employment.

Owing to the diminution in the number of cases of truancy, it is now only necessary to provide accommodation in one school for about 100 boys of this class. Boys are committed until they reach the age of 14, but after a short period of detention they are given a licence, and so long as they attend a day school regularly no further action is taken; but if they fail to do this they are taken back to the truant school for a further period.

Day industrial schools are schools in which the children are fed, taught and trained, but are not clothed or provided with lodging; they attend from 8 a.m. to 6 p.m. daily, except Sunday, and during this time the routine is similar to that of the residential industrial schools. Children cannot be retained at the day industrial schools after 14, and when children attain that age no difficulty is experienced in getting situations for them.

REFORMATORY SCHOOLS.

These schools are intended for the reception of young persons up to the age of 16 years, who, having been convicted, are committed to them in lieu of being sent to prison.

The Council has no reformatory school of its own, but it has agreements with 24 schools for the reception of young persons committed from Courts in London, and there are now 541 such cases, viz., 483 boys and 58 girls, in these schools.

PLACES OF DETENTION.

Under the provisions of the Children Act, 1908, three buildings, accommodating in all about 150 (formerly known as remand homes

but now called places of detention), have been transferred from the Metropolitan Asylum's Board to the Council. Children on remand, of whose cases await a hearing, are admitted to these institutions and receive board, lodging and suitable clothing; they are also given instruction of an elementary character.

A CONTROL OF THE CONTROL SECONDARY EDUCATION.

SECONDARY SCHOOLS.

In order to be recognised as a secondary school by the Board of Education a school must offer to each of its pupils a progressive course of general education (with the requisite organisation, curriculum, teaching staff and equipment) of a kind and amount suitable for pupils of an age-range at least as wide as from 12-17. Provision made for pupils below the age of 12 must be similarly suitable, and in proper relation to the work done in the main portion of the school.

In 1904, when the London County Council assumed, its powers. with regard to higher education, there were 88 public* secondary schools in London, providing accommodation for about 30,000 pupils. These schools varied greatly as regards origin, aim, constitution of governing body, and scale of fees charged. A considerable number of them were endowed schools of established reputation, supported entirely by income from endowment and fees. Of these, the St. Paul's School, founded by Dean Colet in 1512, may be taken as an example. This school and some other schools founded at a later date, among which some of the most important are those of the Girls' Public Day School Trust, may be described as first grade schools. Their curriculum is designed so as to meet the requirements of a certain proportion of pupils who will remain at school to the age of 18, and of whom a certain number will continue their education at one of the Universities. The Girls' Public Day School Trust, which was inaugurated in 1872, has for nearly 40 years taken an important part in providing in London and the provinces a scheme of first grade education for girls.

A considerable number of second grade schools have also been established from time to time in London with the aid of charitable endowments. These second grade schools were intended for pupils whose school life would not as a rule be extended beyond the age of 16.

Since 1904 the Council has found it necessary to supplement the provision of secondary education by organising 20 secondary schools under its own management. These County Secondary schools provide accommodation for about 6,000 pupils.

^{*}By a public secondary school is here meant one which is not conducted for private profit.

Since the passing of the Education Act of 1902, the provision and coordination of secondary education has become one of the duties of the local education authorities. Considerable development has, in consequence, taken place and the distinction of "grades" between the various types of schools has tended to become less marked.

There is, however, still a considerable variety in the types of secondary schools. This is shown by the differences in the fees, which vary from about ± 30 to about ± 3 a year.

For many years since the passing of the Technical Instruction Acts, the Council has made annual grants to more than 40* of the secondary schools in London. These schools are visited from time to time by the Council's Inspectors, who report where improvement appears to be required. One of the objects which the Council has had in view in making grants is the improvement of the teaching staff by means of the offer of adequate salaries, realising that the efficiency of the school depends on the efficiency of the staff and that capable teachers can only be attracted by adequate remuneration. Grants have also been made for the proper provision of accommodation for science, art, and manual work, and for teachers' and pupils' libraries. The grants towards the enlargement of the buildings have been considerable.

The total public secondary school accommodation in London at the present time is approximately 16,000 for boys and 19,000 for girls, a total of about 35,000 or about 7.4 per thousand of the population.

The Council has introduced a scale of salaries applicable to secondary schools maintained or aided by the Council. Head masters receive salaries varying from £400 to £800 a year, and head mistresses salaries varying from £300 to £600 a year, according to the size of the schools. Assistant masters commence at a minimum of £150 and rise by increments of £10 to £300 and in some cases £350; assistant mistresses commence at a minimum of £120 and rise by increments of £10 to £220 and in some cases £250.†

THE SCHOLARSHIP SCHEME.

In addition to the numerous scholarships and exhibitions which are awarded under schemes regulating the administration of many educational charities and foundations, a comprehensive system of scholarships has been established by the London County Council. These scholarships may be divided into three classes: the county scholarships, the technical and trade scholarships, and scholarships for students intending to become teachers.

The county scholarships provide a complete scheme by which a boy or girl may proceed from the public elementary school at the age of II

^{*} For the educational year 1910-11 there were 42 secondary schools receiving annual grants from the Council.

[†] A lower scale is in force for assistants who do not possess a University degree.

to the highest grades of education at a University, technical college, or other institution providing advanced training.

Every boy and girl in the elementary schools in London who has reached a certain standard by the age of II is required to sit for an examination in English and Arithmetic. On the result of this examination combined with the reports from the schools, about 1,700 junior county scholarships are awarded each year. These scholarships, which are also open (under a condition as to income) to children who are not in attendance at elementary schools, are tenable at almost any secondary school in London for 3 years in the first instance and are renewable for a further period of 2 years if the scholar is reported to be capable of profiting by further education, i.e., they are held as a rule till the scholars attain the age of 16. (Boys and girls who do not succeed in obtaining junior county scholarships at the age of II have an opportunity of entering for supplementary junior county scholarships at the age of 13.) At the age of 16 some of the scholars will leave school for industrial or business pursuits; others will be recommended for bursaries, which will enable them to continue at secondary schools for another year with a view to entering the teaching profession; others will obtain intermediate county scholarships which will enable them to continue their education at school until the age of 18 or 19. About 300 of these intermediate county scholarships are offered for competition each year. They may be competed for both by junior county scholars and by other pupils in secondary schools, whose parents' incomes do not exceed a certain limit. On attaining the age of 18 intermediate scholars or other eligible pupils in secondary schools may apply for senior county scholarships enabling them to proceed to a university or a technical college and go through a three years' or in some cases four years' course of advanced study.

The scholarships for the preliminary education of teachers consist mainly of bursaries followed by student teacherships. Each of these awards is tenable for one year. During the tenure of the bursary the scholar continues his education at the secondary school. During the year of the student teachership he is engaged for the greater part of his time in receiving training in the art of teaching in a public elementary school, and at the end of the year he enters a training college. The bursar and student teacher system has now practically superseded the old pupil teacher system. The Council has decided to discontinue the award of pupil teacherships after 1911.

The technical and trade scholarships consist partly of day scholarships which are of sufficient value to enable a student to devote his whole time to study and partly of evening exhibitions to assist those who are employed in the daytime to continue their studies in the evening. Special attention has been given recently to the establishment of trade scholarships to enable boys and girls of about 14 years of age to qualify themselves for some particular trade or occupation. Among the occupations provided for are Book-Production, Building, Cookery, Engineering, Furniture and Cabinet Making, Silversmithing, Woodwork, Woodcarving, Corset-making, Dressmaking, Laundrywork, Millinery, Photography, Upholstery, Ladies' Tailoring and Waistcoat Making.

The scholarships awarded by the Council provide the holders, as a rule, with certain maintenance grants as well as with free education.

There are also a certain number of scholarships awarded to girls of about 14 years of age, tenable at domestic economy schools, at polytechnics and technical institutes. These awards are primarily intended to train girls as "home makers."

THE TRAINING OF TEACHERS.

Those certificated teachers who are trained (amounting in London to 13,000 out of a total of 16,500) have been through a course generally of two years' duration at a recognised training college. The majority of the training colleges in the United Kingdom have been established by independent organisations, in most cases by religious bodies, but there are a considerable number of day training colleges attached to the Universities, and since the passing of the Act of 1902 local education authorities have had the power to establish colleges of their own. The London County Council was the first local authority to avail itself of this power and it has now seven training colleges of its own, viz.:—

The London Day Training College, Southampton-row, W.C. (for men and women)—providing a three-year course.

The Avery Hill Training College, Eltham (for women). Day and residential.

The Islington Day Training College, Offord-road, Barnsbury, N. (for men).

The Clapham Day Training College, Cedars-road, Clapham, S.W. (for women).

The Fulham Day Training College, Finlay-street, Fulham, S.W. (for women).

The Graystoke-place Day Training College, Fetter-lane, E.C. (for women).

The Moorfields Day Training College, White-street, Moorfields, E.C. (for women).

The four last-named colleges are at present in temporary premises, and it is intended that they should be replaced as soon as possible by three permanent colleges.

The Council also has the right to nominate a certain number of

students a year for admission to the Goldsmiths' College, New Cross, for men and women; but this arrangement will be discontinued after 1911.

The majority of the students who attend training colleges take a course extending over two years, during which time they continue their general studies and also receive instruction in the theory and practice of education, devoting a certain number of weeks to obtaining experience of teaching in the elementary schools under the supervision of the college staff. The students of the London Day Training College, which has been recognised as a "School of the University," devote three years to the course. During the first two years they give most of their time to preparation for the London degree of B.A. or B.Sc., and they spend the third year mainly in professional studies. At the conclusion of the college courses certificates are awarded by the Board of Education.

. CLASSES AND LECTURES FOR TEACHERS.

The Council, having in mind that a teacher to be successful must continue to be a student, makes considerable provision for classes and lectures for teachers engaged in public elementary and secondary schools in London. The permanently organised classes for teachers may be divided into three main groups—(1) classes intended to improve the teacher's efficiency in regard to certain special subjects of the school curriculum, such as Drawing, Science, Singing, Infant Work and Drill; (2) lectures and demonstrations at public galleries or museums with the object of enabling teachers who take their classes to these galleries to make the visits more beneficial and more interesting to their pupils; and (3) University Classes which have been established with a view to bringing the teachers into contact with original workers in various branches of learning. During the session 1910-11 9,213 teachers were enrolled in classes coming under the first category, and 650 in classes coming under the second category. The classes in the third category are organised by the University of London at such schools of the University as the University College, King's College, King's College for Women, Bedford College, and the London School of Economics and Political Science. The subject matter of the lectures covers a very wide range, including such different subjects as Modern Languages and Literature, History, Science, Mathematics and Domestic Science. The number of teachers who enrolled themselves at these lectures in Iq10-II was 2,762.

The total number of entries to the classes and lectures for teachers during the session 1910-11 was 12,625.

In addition to the above classes, which may be considered as forming part of the permanent educational system of London, the Council has established classes for assisting unqualified teachers in non-provided

schools in London to obtain some recognised qualification. These classes may be regarded as a temporary expedient rendered necessary by the situation created by the Education Act of 1902. As all teachers now appointed to the London service must possess the Teachers Certificate, the need for the classes will gradually disappear.

UNIVERSITY EDUCATION.

University Education in London has undergone considerable development since the University of London was re-organised in 1900. Up to that time the University had been an examining body only and the various institutions which provided instruction of University rank were not organically connected with it. Since 1900 effect has been given to the University of London Act (1898), the University has become a teaching as well as an examining body, and the institutions of University rank have become closely associated with it. In three cases (University College, King's College and King's College for Women) the institutions have been incorporated in the University. In other cases the institutions are carried on in connection with the University and are called "Schools of the University."

The University is also responsible for the organisation of courses of University Extension Lectures and undertakes the examination of Secondary Schools.

The following is a list of the Incorporated Institutions and the "Schools of the University."

Incorporated in the University.

University College, Gower Street, W.C.

King's College, Strand, W.C.

King's College for Women, Kensington Square, W.

Conducted as "Schools of the University."

The Imperial College of Science and Technology, South Kensington, including as integral parts the institutions hitherto known as the Royal College of Science, the Royal School of Mines and the Central Technical College.

Bedford College, York Place, Baker Street, W. (for women only).

London School of Economics and Political Science, Clare Market, Kingsway, W.C.

Westfield College, Kidderpore Avenue, Hampstead, N.W. (for women only).

East London College, Mile End Road, E.

The Royal Holloway College, Englefield Green (for women only). The South Eastern Agricultural College, Wye.

The London Day Training College, Southampton-row, W.C. Five Theological Colleges.

Ten Medical Schools attached to Hospitals.

In addition to the institutions named above, there are 16 other institutions (including 8 of the London polytechnics) at which some of the teachers are recognised as teachers of the University, the students who attend approved courses under these teachers being recognised as "internal students."

The University of London is under the management of a Senate, which is composed of the Chancellor, the Vice-Chancellor, the Chairman of Convocation, and 54 other members who are nominated or appointed in accordance with statute. The Earl of Rosebery is the present Chancellor, Prof. M. J. M. Hill Vice-Chancellor, and Sir Edward Busk Chairman of Convocation. The Principal of the University is Dr. Henry Alexander Miers. The University offices and a Research Laboratory in Physiology occupy a part of the buildings formerly assigned to the Imperial Institute in Exhibition Road, S.W.

The London County Council works in close connection with the University, and makes considerable annual grants both to the University itself and also to the constituent Schools of the University, including the Imperial College of Technology. During the year 1909—10 building and equipment grants were voted by the Council to three of the Schools of the University, viz., Bedford College, University College and the London School of Economics and Political Science.

The whole question of the organisation of University education in London is at the present time under the consideration of a Royal Commission which was appointed in February, 1909, and which has not yet issued its report.

TECHNICAL AND EVENING SCHOOL EDUCATION.

POLYTECHNICS AND TECHNICAL INSTITUTES.

Higher professional instruction is provided at the Imperial College of Science and Technology, at University College and King's College, and other institutions of University rank. In addition, a large share of the work of technical instruction, especially of students who are engaged in some branch of industrial employment during the day, is carried on in polytechnics and technical institutes. These institutions may be divided into three categories:—

- (1) Those aided by the London County Council.
- (2) Those maintained by the London County Council.
 - (3) Those receiving no aid from the London County Council.

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The institutions vary greatly in size. Thus, the Regent Street Polytechnic has over 10,000 students and receives grants from the Council amounting to over £10,000 a year, while one or two of the institutions have less than 100 students and receive correspondingly small grants from the Council.

The institutions aided by the Council have on their books the names of over 35,000 students and they receive annually from the Council building, equipment and maintenance grants, amounting to about £110,000. Apart from the financial assistance given by the Council, their income is made up of Board of Education grants, endowments, grants from the City Parochial Foundation, students' fees and voluntary subscriptions. Included in this division there are ten polytechnics, the Goldsmiths' College (Art School and Evening classes), a number of Art Schools, "Monotechnic" institutions, such as the St. Bride Foundation Institute Printing School and the Leathersellers' Company's Technical College, and a group of institutions such as the Working Men's College and the Morley College, which deal largely with the humanities. Each institution has a governing body on which the Council is represented.

The institutions maintained by the Council are 17 in number. They cost annually about £81,000, and deal with nearly 12,000 students. The difference between this expenditure and the receipts from Government grants and fees is made good from the rates. The most important of these schools are the Central and Camberwell Schools of Arts and Crafts, which provide instruction in a great variety of artistic crafts; the Paddington Technical Institute, of which the chief work is in connection with the Engineering and Building Trades; the Hackney Institute, which deals with engineering subjects and has also an art school, a music department, a science department and building trade classes; the School of Building, Clapham, which deals only with Building Trades; the Shoreditch Technical Institute, which provides chiefly for the Furniture Trades; and the School of Photo-Engraving and Lithography (Bolt Court, Fleet Street), temporary premises—Fleet Lane, Farringdon Street, E.C., for the Photo Process and Allied Trades.

The Council is assisted in the management of its schools by Advisory Sub-Committees and Consultative Committees of trade experts. These Trade Committees advise the Council in connection with the detailed administration of the work of the respective industries. The Advisory Sub-Committees are local, and each is attached to some particular institute maintained by the Council. A number of the Consultative Committees are attached to particular institutions. In addition to these there are Central Consultative Committees for the Book-production Trades (including the Bookbinding Trades, and the Printing and Allied Trades), the Goldsmiths', Silversmiths', Jewellers' and Allied Trades, the Furnishing Trades and Men's Tailoring Trades. Each

Committee consists of three groups of trade experts, directly representing respectively the Council itself, the Associations of Employers, and the corresponding Trades Unions (or Federations of Allied Unions).

The great majority of the students who are in attendance at these technical institutions are evening students who are engaged in commercial or industrial pursuits in the day-time. There is, however, a steadily growing number of day students who are either preparing to take up industrial work or who are already so engaged and are able to attend day classes by permission of their employers. The Evening Trade Classes which constitute the bulk of the evening work are, as a rule, confined to bona fide workers of the respective trades. The fee for these classes is small and in the Council's own institutions apprentices, improvers and learners under 21 years of age are admitted free.

Increasing importance is being attached to the organisation of Day Trade Schools for boys and girls who are leaving the elementary schools; these schools provide a course extending over two or three years, and are intended to prepare boys and girls for some particular skilled industry.

The day work covers a wide field and includes courses for students working for their degrees; art classes for training designers, teachers, and skilled craftsmen; pre-apprenticeship instruction for boys entering such trades as Engineering, Building, Silversmithing, Book-Production, Furniture, and Cookery; trade instruction for girls in Dressmaking, Waistcoat Making, Upholstery, Corset Making, Millinery, Ladies' Tailoring, Laundry, the Designing and Making of Wholesale Costumes, and Photography and Domestic Economy classes for girls and young women. The Council has also agreed to the establishment of classes in Cookery, Hairdressing, and Stockkeeping.

Practically all the classes in the schools in (1) and (2) are assisted by grants from the Board of Education, which amount annually to upwards of £52,000.

The most important institution in division (3) is the City and Guilds Finsbury Technical College, which provides a two-year course for those desirous of entering the mechanical engineering and electrical engineering trades and a three years' course for those entering chemical trades, Other schools which may be mentioned as coming under this head are the Trades Training School, Great Titchfield Street; the Leather Trades School, Bethnal Green-road; and the South London Technical Art School.

Some of the scholarships and exhibitions referred to on page 20, varying in value from £50 to £5, are tenable at the various polytechnics and technical institutes in the County.

EVENING SCHOOLS.

In addition to the polytechnics and technical institutes London possesses a large number of evening schools, conducted in the buildings of the Council's elementary schools. These evening schools are of three kinds, namely: free schools, ordinary evening schools, and commercial and science and art centres.

In the free schools, instruction is provided in such general subjects as reading, writing, arithmetic, English, history and geography (illustrated by lantern slides). Classes are also held in vocal music, gymnastics and physical drill, swimming, first aid, home nursing, cookery, laundrywork, millinery, dressmaking and needlework. In some of these schools an industrial course in technical drawing and workshop arithmetic is taken preparatory to the industrial courses at the technical institutes. Instruction is also given in woodwork, woodcarving and metalwork.

In regard to the ordinary schools, although most of the subjects taught in the free schools are also taken at the ordinary schools, the work in the general subjects is of a more advanced character. In addition, elementary instruction is given in commercial subjects, such as book-keeping, shorthand, typewriting, and office routine. Students are prepared for examinations for the minor appointments in the Civil Service, and for those conducted by the Royal Society of Arts and Chamber of Commerce. Classes are also held in many of the schools for the study of English literature and foreign languages.

The commercial centres are intended for students whose previous education enables them to take advantage of the more advanced character of the instruction given. Organised courses, covering two or three years, and consisting of two or more subjects, are arranged so as to provide a progressive course of study. Students under 18 years of age are only admitted to the centres on condition that, as a rule, they join a course and guarantee to attend regularly on at least three evenings a week. In addition to the more advanced work in the commercial subjects taken in the ordinary schools, special classes are conducted in such subjects as accountancy, banking, commercial law, etc.

The science and art centres provide elementary and intermediate instruction in science and art subjects leading up to the advanced work at the technical institutes and schools of art and the polytechnics.

The free and ordinary schools are open generally on three evenings a week, between the hours of 7.30 and 9.30, and the centres on four evenings a week for about two and a half hours each evening.

The fees charged to the students are 1s, the session in the ordinary schools, 2s, 6d, the session in the commercial centres, and 5s, the session

MOULVI WAHED HOSSAIN, B. L.

Secretary to the Provincial Muhammadan Educational Conference, Bengal.

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SIR.

I am further desired to submit for your consideration the scheme for a Provincial Residential College for the Moslem youths of Bengal, in connection with the resolution no. III. The Committee hope that the proposal and the scheme will receive a sympathetic treatment at your hand and evoke a generous response for its realisation.

9. Halsibagan, Road CALCUTTA Dated the 20th Noor, 1911. I have the honour to be Sir,
Your mosto bedient Servant
WAHED HOSSAIN,
Srey. P. M. E. Conference,
Benyal.

RESOLUTIONS.

I. That this Conference while associating itself with the universal rejoicings on the auspicious occasion of the Royal Visit to India, expresses its sentiments of deep loyalty and and firm attachment to the persons of their Imperial Majesties the King-Emperor and the Queen-Empress and offers its tribute of homage to the British Throne.

Put from the chair and carried unanimously.

II. That this Conference expresses its sense of gratitude to Government for its assurance of granting a Charter for the proposed Muslim University and appeals to the Mahomedans of this Province to exert themselves to the best of their ability and power to help the movement with liberal contributions.

Proposed by Moulana Shah Sulaiman Saheb, of Falwari. Seconded by the Hon'ble Mr. Mazharul Haque.

Supported by Mr. Mahomed Ali, Moulvi Mazammel Haque and Moulvi Akram Khan.

Carried unanimously.

III. That in order to meet the growing demand of higher Collegiate education among the Mahomedans, this Conference invites the attention of the Government to the necessity of raising the Calcutta Madrasah to the status of a First Grade College at a very early date.

Proposed by Mr. Wahed Hossain B.L. Seconded by Mr. Mirza Ahmed Ally. Supported by Mr. M. Azizul Haque.

A lopted unanomousty.

IV. That this Conference urges upon the Government the desirability of instituting a thorough enquiry into the management of the Syedpur Trust Estate and of appointing a qualified Mahomedan to the post of Manager.

Proposed by Mr. Mahboob Ali of Calcutta.

Seconded by Mr. Mujibur Rahman Editor of the

Mussalman.

Supported by Moulvi Abu Tyab of Marshidahad.

· Adopted ununinously.

V. That this Conference urges upon the Government the necessity of admitting Muslim students to the Presidency College at least in proportion to the Muslim population of Bengal.

Proposed by Moulvi Rafiuddin, pleader, Kushtea.

Seconded by Mr. Slddiqur Rahman B.A., Head Master.

M. L. Jubilee Institution, Calcutta.

Carried unanimously.

vI. That in the opinion of this conference the present system of allotment of funds by the District Boards is not fair and that in order to safeguard the interests of the various communities it should be distributed in proportion to their population in the districts concerned.

Proposed by Moulvi Syed Abu Tyab of Murshidabad.
Seconded by Moulvi Mozzzam Ali of Burdwan.
Supported by Shaikh Zamiruddin of Natio.

Carried ununimously.

VII. That having regard to the fact that there are 199 Gurn-Training Schools established and maintained by the Government at an annual cost of Rs. 2,66,440 and a further expenditure of Rs. 1,34,693 on their building accommodation. this Conference regrets that not a single school for Mianji training, which is badly wanted in the interest of Muham-

medan education of this Province, has so far been established by the Government, the Conference now respectfully urges upon the Government the pressing necessity of starting Mianji training schools at important centres.

Proposed by Moulvi Maniruddin of Balasore.

Seconded by Moulvi Fazlur Rahman of Nadia.

Supported by Moulvi Syed Abdul Quddus and Imam Ali.

Carried nem con

VIII. That in consideration of the fact that the addition of Arabic as a compulsory subject of study along with Persian for Matriculation, Intermediate and B. A. Examinations, has proved highly prejudicial to the educational interest of Moslem students the Conference urges upon the authorities the desirability of excluding Arabic from the Persian courses as has been done by the Allahabad University.

Proposed by Moslvi Yaqinuddin Ahmed, B.L., of Dinajuur. Seconded by Mr. Siddiqui Rahman, B.A. Head Master, M. L. Jubilee Institution, Calcutta.

Supported by Mr. S. A. A. Asghar, Bur-at-luw.

Carried nem con

IX. That this Conference trusts that the Government will allot the Muhammedans an adequate and proportionate share of the Extraordinary Educational Grant for the current year and further recommends that the scheme of Mr. Earle should, as far as possible, be given effect to, out of such apportionment.

Proposed by Moulvi Rafinddin, Pleader of Kushtia.
Seconded by Moulvi Md. Akram Khan, Editor of the
Mahammadi.

Carried nem con

X. That in the opinion of this Conference, the special officers who have been appointed to supervise Muhammadan education should have powers of initiative and control as

without such powers they have failed to fulfil the purpose for which such posts were created.

Proposed by Mr. Wahed Hussain, B. L.
Seconded by Prince Akram Hussain, of the Outh family.

Carried unanimously.

XI. That the Conference deems it necessary to draw the special attention of the Government to the needs of Muhammadan female education in the province and request that a fair nallotment be made for the purpose, and the distribution of such allotment be left to the direction of the Inspectress of schools for female education.

Proposed by Munshi Meherulla of Pabna.
 Seconded by Mr. S. M. Sultan of Patna.
 Supported by Munshi Ibrahim Hussain of Nadia.

Carried unanimously.

XII. That this Conference expresses its deep regret at the racial feeling recently displayed by the authorities concerned in excluding a Moslem student who had passed the B. A. with Honours in Sanskrit, from attending University lectures for the M. A. course, and requests the Government to remove the unjust and artificial bar from the way of Muslim graduates intending to attend such lectures.

Proposed by Moulvi Yaqinuddin Ahmed, B. L. Seconded by Munshi Mezommul Haq of Nadia.

Carried nem con.

XIII. That in spite of the assistance given by the Government in its reply in letter No. 1189, I. G. dated the 4th July 1910, to the resolution No. 23, adopted at the last session of the Conference regarding the removal of the junior department of the Hooghly Madrasah from the existing building, which was purchased out of the Mohsen endowment, this Conference brings with regret to the notice of the authorities concerned that the junior department attached to the Madrasah has been

removed to a different place, and requests the Government to return the classes to the Madrasah building.

Moved by Shaikh Zamiruddin of Nadia. Seconded by Mr. Mujibur Rahman, Editor of the Mussulman.

Carried unanimously.

XIV. That as the Principal of the Hooghly College is not conversant with Arabic and Persian, and with the wants and needs of the Hooghly Madrasah, in the opinion of this conference it is necessary that the Superintendent of the said Madrasah be made independent of the Principal of the Hooghly College as is the case in the Dacca and Chittagong Madrasahs.

Proposed by Moulvi Wuhed Hossain, B. L. Seconded by Moulvi Mohammad Ali Chowdhury.

Adopted unanimously.

XV. That in the opinion of this Conference the circular letter issued by the Director of Public Instruction, making it a condition for the recognition of the junior Madrasahs that in each class there should be certain fixed number of pupils, will defeat the object of Mr. Earle's scheme and will be prejudicial to the interests of Muhammadan education in this Province.

Proposed by Moulvi Fazlur Rahman of Nadia. Seconded by Moulvi Nurul Haq of Howral.

Carried nem con.

XVI. That as the vernacular has been made compulsory in several examinations of Calcutta University, and that almost all the text-books and recommended books in Bengali and Ooriya are full of Hindu mythologies and traditions not suited to the religious and national traditions of the Muhammadan students, this Conference requests the authorities of the

Calcutta University to prescribe books which may satisfy the requirements of Muhammadan students in this regard.

Proposed by Mr. S. A. A. Asghar, Bar-at-Law, Seconded by Mr. Azizul Haque of Nadia.

Supported by Moulvi Nurul Haque of Howrak.

Curried nem con.

XVII. That in the opinion of this Conference the Government may be pleased to give early, effect to the scheme of Mr. Earle for the promotion of the study of English in the Bengal Madrasahs, and further begs to urge the importance and necessity of making English a compulsory subject.

Proposed by Mr. H. M. Sultan of Patran. Seconded by Nawab Ismail Khan do.

Carried nem con.

XVIII. That this Conference is of opinion that the pass marks for Title class in the Bengal Madrasahs should not be so high as 75 per cent, and recomends that the pass marks should be lowered to the level of pass marks fixed for the M. A. standard of the Calcutta University.

Proposed by Moulvi Md. Akram Khan, Editor of the Muhammadi.

Seconded Moulvi Ataur Rahman M.A.

Invested new con.

XIX. That this Conference respectfully prays that a portion of the Hostel under construction at Balasore for the accommodation of more than 50 boarders, should be set apart for Muhammedan students.

Proposed by Moulvi Md. Maniruddin of Balasore.
Seconded by Moulvi Syed Ahmed Ali of Culcutta.
Supported Moulvi Mozammul Haque of Nadia.

Curied nem con.

XX. That this Conference urges upon the Government that adequate and proper provision should be made for the teaching of Arabic, Persian and Urdu in all Government and Aided Schools, and this Conference specially draws attention of the Government to the inadequacy of such provision in the Balasore Zillah School.

Proposed by Moulvi Md. Maniruddin of Bulusore. Seconded by Moulvi Abul Kasem B.A. of Burdawan.

Carried unanimously.

XXI. That this Conference accords its full support to the principles embodied in the Elementary Education Bill introduced in the Supreme Legislative Council by the Hon. Mr. G. K. Gokhale, and impresses upon the Government its importance and the necessity of enacting it into a law with such modifications and safeguards as regards the special requirements of Muhammadans as may be necessary in the light of Muhammadan opinion on the subject.

Moved by Moulana Abul Kalam Azad of Calcutta. Seconded by Mr. Mohammad Ali B.A, Editor of the Comrade.

Supported by Mr. Wahed Hossain, B. L. Kousaruddin Ahmed and Mr. A. A. Asghar, Bar-at-law.

Carried nem con.

XXII. That as the primary education is entirely under the control of the District Boards, and the Education Committee of the Boards regulates the matter, the Government be moved to see that Muhammadan members of the Education Committee of the District Boards be in proportion to the Muhammadan population of the districts.

Moved by Moulvi Abul Kasem BA. of Burdwan. Seconded by Mr. Mebammad, Ishaq.

Carried nem con.

XXIII. That this Conference draws the attention of the Government to the desirability of translating the Standard Arabic books into English and having them properly indexed.

Moved by Moulvi Najmuddin, retired Deputy Magistrate. Seconded by Mr. A. A. Asghar, Bar-at-law.

Carried nem con.

XXIV. That in the opinion of this Conference, it is desirable that candidates in all University examinations be required to put down the roll number in words in their examination papers instead of both name and number.

Proposed by Mr. Siddiqur Rahman B.A. Seconded by Moulvi Rafiuddin, *Pleader of Kustea*. Supported by Munshi Muhammad Meherulia.

Carried unanimously.

XXV. That in the opinion of this Conference it is necessary in the best interest of Muhammadan Education inthis province, that the Government be pleased to appoint one Muhammadan Assistant Director of Public Instruction. one Muhammadan Inspector of Schools in each Division and one Muhammadan Deputy Inspector of Schools in each District.

Proposed by Nawab Nasir-ul-Mamalek Mirza Shujat Ali Khan Bahadur.

Seconded by Moulvi Yaqinuddin Ahmad, B.L. Pleader.

Carried unanimously.

XXVI. That this Conference puts on record its extreme regret at the untimely and sad death of Shamsul-ulama Dr. Syed Ali Bilgrami, whose scholarly and linguistic attainments were unique not only among Muhammadans but in the whole country and offers its sincere condolence to the family of the deceased.

(.Put from the chair).

EXPLNATORY NOTES

On some of the

Resolutions adopted during the Sixth Sessions of the P. M. E. Conference.

Risolution V. The Committee begs to point out that Muslim students are annually increasing in number and that there has been a growing demand for admission to the Presidency College but owing to the limit put on the number of Muslim students not more than 35 of them can be admitted to the first and second year classes of the Presidency College: The year before last, a number of the Muslim students could not get admission to the college; the last year, same thing happened again, their number being greater than in the previous year. Several casses have been brought to the notice of this Committee where the Muslim students having failed to secure admission to the Presidency College could not get admission even to private colleges owing to the prior claim of those candidates who have passed the Matriculation Examination therefrom. Moreover, in some of the private colleges there is no provision for teaching Arabic and Persian and therefore they do not serve the purpose of the Muslim students. It is needless to point out that Muhammadans have just begun to avail themselves of the benefits of Higher Collegiate Education and that any artificial check which tends to retard its progress is extremely detrimental to their educational interest. Under the circumstances it has now become necessary that the limit placed upon the number of Moslem students desirous of getting admission to the Presidency College, should be removed. The Committee, therefore, hopes that the Government will be pleased to do away with the artificial restriction and allow the Muslim students to take admission to the college in proportion to the number of Moslem pupulation in the Bengal Presidency.

With reference to the remark made in your letter No. T 165 dated the 5th October, 1910, in reply to a letter addressed by this committee on the above subject, the committee begs to submit with due respect that the remark, viz, "the concession seems to be extremely liberal one ensuring as it does the admission of 35 students for each of the 1st and 2nd year classes on the extremely low fee of Rs. 2 a month," is not accurate as the deficit of Rs. 10 a month is made up by the Mohsin fund.

Resolution VI. The committee submits that the present method of allotment of Educational Fund in the hands of the District Boards and Municipalities is defective as the various communities living within their jurisdiction do not get their proper shares of the fund. In the case of the Muhammadan community, these bodies managed as they are by the non-Moslem Members, often pay but a scanty attention to the educational requirements of the Muhammadans. The educational committees under the District Boards and Municipalities not only grudge to grant a proper and fair allotment for Muhammedan Education but some of these Bodies have curtailed their grants to Makfals in consequence of the increased provision for such schools from the Provincial Revenues. (vide para 281 of the Education Report in Bengal . for 1000-10). Moreover, some of the District Boards adopt a peculiar method of dividing the Educational Grant at their disposal. The fund is first divided into two parts-one for the "Hindus" and one for the other races," and then the portion of the fund set apart for the "other races" is subdivided into several parts for such races as Teli, Bagdi. Namasudra etc. The latter are first counted as "Hindu" for the purpose of the grand division but at the time of sub-division they are classed as "non-Hindus." By this method of division, double advantage is taken by the Hindu while other races are deprived of their just and proper share. The Committee of the Conference therefore submits that the educational grant under the District Boards should be allotted to each community in proportion to its population.

R solution VII. In submitting this resolution for the consideration of Government the committee begs to observe that if the multiabs under Mr. Earle's scheme are to be useful institutions and really meant to be the necleus for Secondary Schools, they should have a better class of teachers acquainted wift the mode of teaching according to the Departmental standard. Mr. Earle recommended the establishment of one Mianjee-training school in each of those districts in which the large number of Miktalia exists or will come into existence. From the Official Report for 1909-10 (vide para 123) it appears that the Government has long been convinced of the necessity and importance of providing the Primary schools with trained teachers and is spending large sums of money in main. taining 199 Guru-training schools and providing accommodation for a large number of Gurus. But it is really regrettable that the reasons which have led the Government to work out the Guru-training scheme at such a heavy cost, did not so long suggest themselves to Government in the case of Maktaiss although the percentage of Moslem boys under instruction is 33-3 i.e. the same percentage as that for the rest of the population of Bengal. And when the importance of the subject was brought home to the notice of Government, the proposal of starting 17 Minnjee-training schools for the whole of the Province has been postponed for want of fund. But the case of 'Gura-training schools present a strange contrast. Such schools were established simultaneously at the rate of two in each Sw-division throughout the whole of the Province. The expenditure for the construction of building for every Guru-training school was estimated at Rs. 5000, besides the establishment charges amounting to Rs. 189 a month, and the total cost of the construction of buildings in a district alone was between 30,000 and 50,000, and the cost of maintenance was between Rs. 1134 and Rs. 1890 according to the number of schools in each district. It is submitted that no question of success or feasibility was then raised as in the case of Mianjer-training

schools, nor did the want of fund stand in the way of establishment of the full number of schools sanctioned. On the other hand, the cost of maintenance of a Mianjee-training school is estimated at Rs. 29 only per month and as it is proposed to convert some of the existing Guru-training schools into Mianjee schools, there is no apprehension of extra expenditure for accommodation etc. The committee therefore respectfully requests the Government to give effect to this resolution at an early date.

- Resolution No. VIII The committee regrets to say that owing to the inclusion of Arabic in the Persian course, the Moslem students have been placed at a great disadvantage as they now have to learn two second languages both of them being equally foreign to them. Moreover, they have to learn e vernacular language, either Urdu or Bengalee, none of which can properly and exclusively be called their mothertongue so far as the Bengal Mohammadans are concerned. So their difficulties in respect of learning the languages required by the New Regulations are all the more great in comparison with their fellow competetors. The effect produced by such a state of affairs has been regretable, and on enquiry this Committee has come to learn that since the inclusion of Arabic into the Persian Course, there has been a considerable fall in the number of the Moslem-students taking up Persian. Owing to the abnormal difficulty of the Perso-Arabic course; many of them have been driven to give up Persian and take French, some of them Sanskrit, and some Latin as their second language.

The Committee submits that Persian as a second language for Indian students can no longer be called one language but a combination of two foreign languages one of which viz. Arabic, requires a thorough grounding in Grammar without the knowledge of which a single line of Arabic can not be read or understood. To no other language (except Persian) which the Calcutta University recognises as 2nd

language, another foreign language has been added, and the student of no other community is compelled to take up a mixed language in the name of one language only; but the students taking up Persian are compelled to learn two languages as their and language unlike their fellow competitors who are required to learn one 2nd language only. Moreover, to add such a difficult language as Arabic to the Persian course is to drive them to the extremity of linguistic difficulty and to raise no small a barrier in the way of their getting successfully through the University Examination. The Committee submits that it is not at all reasonable nor justifiable to create artificial difficulties in the way of certain class of examinees only, nor is it desirable to adopt such a course which will ultimately drive out Persian from the carriculum of the University owing to the want of students willing to take up a mixed course.

It has been faintly suggested in certain quarters that a fair knowledge of Arabic is necessary for the scientific study of Persian. Now, to study a particular language scientifically, it may be necessary to have a fair knowledge of the cognate languages to which it bears a family resemblance; but this may be so in the case of research scholars only. It can not be laid down as a general rule in the case of all and every student many of whom change their courses of study and take up different subjects for higher Examination. Moreover, Persian is closely allied to and intimately connected with Sanskrit: but it has no family resemblance with Arabic. Philologists and antiquarian Researchers affirm that from 30 to 35 per cent of Arabic words are to be found in the Persian tongue, while it contains 60 to 65 per cent of words akin to Sanskrit. Moreover, the roots of almost all Persian words as well as its verb, suffixes and prefixes hear a close family resemblance to that language. Now, "it will hardly be disputed that scientific study of the Persian language depends upon a fair knowledge of Sanskrit and that a knowledge of Arabic is as much necessany as that of Sanskrit for a thorough grasp of the Persian tongue. Again, an analysis of the Persian language clearly shows that a fair knowledge of Turkish is also necessary for the study of Persian as it contains no small number of Turkish words. But it is not even suggested that Sanskrit and Turkish should be added to the Persian course on the same grounds as Arabic. In the same way it may be pointed out that a scientific study of English requires a fair knowledge of Latin and other cognate languages and still Latin is not included in the English course prescribed for the Matriculation Examination. The Committee, therefore, submits that it is not at all necessary nor desirable to include Arabic in the Persian courses and that it may safely be excluded without impairing the importance of the Persian language.

In this connection, I may permitted to point out that the Allahabad University has in the long run been convinced of the hardship and inconvenience which the Moslem students are now experiencing owing to the bilingual nature of the Persian course of study and adopted a resolution in a recent meeting for excluding Arabic from the Persian course. The Committee of this Conference trusts that the authorities of the Calcutta University will be good enough to take this representation in their sympathetic consideration and remove the impediment from the path of the Moslem student.

Resolution IX and XV. The Committee begs to submit that in 1908 the Hon'ble Mr. Earle then the Director of Public Instruction, Bengal, drew up a scheme for the improvement of Maktabs and Madrasahs and submitted it to Government in his letter no. 246 T dated roth June, 1908 for its approval. The scheme being approved, instructions were issued to give effect to its provisions on the lines indicated in the scheme.

This committee has come to learn with satisfaction that owing to the impetus given, numerous Maktabs and junior Madrasahs have sprung up in various districts of this

Province and energetic efforts are being made for bringing them up into the lines of Mr. Earle's scheme. Many of these institutions have adopted the prescribed course of study and appointed qualified teachers as required by the Yet the grant-in-aid has not been extended to many of them, and in several cases although the grant has been sanctioned, payment is kept in abeyance for reasons best known to the authorities concerned. Moreover, the recent Circular containing certain conditions and restrictions now imposed upon these infant institutions tend greatly to retard their growth (vide D. P. I. circular letter no. T 191 dated 5th May, 1911.) The committee begs with due respect to point out that these artificial restrictions are not made applicable to Middle and High English Schools aided and unaided and that if the same conditions and limitations be applied to English schools, majority of them will cease to exist or go out of the list of grant-in-aid schools. It may fairly be presumed that they are now maintained with the Government aid in the hope of their future improvement. But the long delay in sanctioning scanty grant-in-aid in the case of Junior Madrasahs and the mode of keeping the payment of the grant in abeyance after its sanction as well as the imposition of artificial restrictions contained in the Circular referred to above, will, it is apprehended, defeat the very object which the scheme has in view. The committee, therefore, earnestly prays that the Government will be pleased to direct the cancellation of the above circular and issue proper instructions to the educational officers concerned for granting aid without unnecessary delay. The committee further prays that out of the Extra-ordinary Educational Grant for the current year, adequate allotment may be made for giving effect to Mr. Earle's scheme.

Resolution X and XXV.—The committee understands that a number of inspecting officers has been appointed to supervise Mulammadan Education. These officers have no

- independent voice and are without powers of initiative and control. Majority of them belongs to the subordinate rank "such as Sub-Inspectors and junior Assistant Deputy Inspectors, of schools who are mere non-entities in the Department. To such officers is entrusted the task of safe-guarding, the educational interest of the Muhammadans. Moreover, under Mr. Earle's scheme (vide para 59 of his letter) these officers are required to inspect the Junior Madrasahs, and when invited by Principals, the Senior Madrasahs also, as well as the High Schools and the Arabic and Persian classes attached thereto. Now, the efficient discharge of duties entrusted to these officers demand a fair knowledge-of Arabic, Persian and Urdu. In the first place, their rank and position are such that they will be unable to hold their own on any controversial point and will be non-plussed at every turn by plausible arguments. Secondly, to safeguard the educational interest of a community -requires a certain amount of experience and courage power of discrimination and firmness of purpose—qualities which can hardly be found in officers of subordinate rank. Thirdly, as a very few of them possess the knowledge of Arabic and Persian, they will hardly be in a position to inspect the Junior and Senior Madrasahs. Under the circumstances, the committee respectfully submit that the appointment of such special officers will not serve the purpose for which they have been appointed. It is trying an experiment, which has once proved failure for want of the power of initiative and control as pointed out by Mr. Earle in the concluding portion of his letter referred to above. In this connection the committee begs to draw the attention of Government to paragraphs 6 and 7 of the letter dated the 18th December, 1910, addressed. to the Government on the subject.

The committee therefore respectfully submits the following suggestions for the consideration of Government as embodied in the Resolution XXV viz appointment of one Muhammadan Assistant Director of Public Instruction, one Inspector of

Schools in each Division and one Deputy Inspector of Schools in each District on the analogy of the Inspector of Schools for European Education and the Inspectress of Schools for Female Education. It may be pointed out that such special efficers for Muhammadan Education need not belong to the higher grade of service. They may be drawn from the existing Muhammadan officers with the pay of their grade and vested with the power of initiative and control. In fact they will be special educational officers so far the Muhammadan Education is concerned and ordinary inspecting officers for general supervision. This can be done by the reorganization of the present inspecting staff, without incurring further expenditure.

· Resolution XI. It will not be correct to say that Muhammadans are as a rule averse to Female Education. Being strict observers of Purdah they are afraid that if the grown-up girls be allowed to attend public schools the stringency of purdah would be relaxed. This is the main reason why the parents and guardians do not like to send their girls to public schools. But there are many parents and guardians who have. no objection to their girls being sent to well-conducted schools strictly conforming to the rules of purdah and imparting an education which is in harmony with the requirements of the Moslem community. This idea of the Mahomedans found full. expression when the Moslem girls school was started in Calcutta in 1907, where a pretty large number of Moslem girls belonging to respectable families attended the school till it was abolished for want of funds. Recently another girl's school' has been opened in Calcutta by the laudable efforts of Mrs. R. S. Hossain, and we are given to understand that a decent number of girls from respectable families attend it withoutobjection. We gather from the official Report that out of the 22 female pupils receiving instruction in the Badshah Nawab-Razvi Training College, 13 are Mahomedans. The practising school run in connection with that College has 23 Muhammadau:

and 19 Hindu pupils. The facts and figures given above clearly show that the conservatism of Musulmans and their strict observance of *purdah* are no absolute bar to Moslem girls attending well-conducted schools or to female education itself.

There is no doubt that many Muhammadans would prefer to have their girls—specially grown-up ones—taught by lady teachers at their own residence. The well-to-do families generally employ A'tus for this purpose, and each family or a group of families has its own A'tu who often performs the double function—the function of a tutoress and that of a governess. But the draw-backs of this method are three;—(1) people with limited means can not afford to engage an A'tu; (2) the number of A'tus is very limited so they are not generally available—especially in Bengal proper or in Orissa; (3) The qualifications of A'tus are very inferior, and they hardly possess the ordinary skill in handiwork or teaching.

If the Government really desires to extend the benefits of education to Moslem girls and to purdah we men it should adopt such methods of imparting education as will be acceptable to both the classes of people described above. We therefore, lay the following proposals for consideration and acceptance of Government:—

- (1) There should be some model schools at important centres, exclusively for Moslem girls, with a staff of female teachers only, and conforming to the strict rules of purdul.
- (2) A special syllabus should be prepared dealing among other subjects with the domestic requirements of the Moslem community. It should contain subjects on general morality as well as rules of conduct having reference to religious practices daily observed in such families. In the case of schools meant for Moslem girls exclusively, the policy of religious neutrality should not be allowed to interfere. The preparation of the syllabus should not be entrusted to educational experts having theoretical knowledge only, but to men of letters with large experience and interested in educational matter.

- (3) Another method should be adopted for the education of purdah women, viz employment of a sufficient number of lady teachers for house-to-house visitation. This method will be acceptable to those who hesitate to send their girls to schools.
- (3) There should be in different centres A'tuji-training schools for better supply of trained female teachers. In order to make this experiment successful, the remuneration of an A'tu or a female teacher should be sufficiently attractive.

Resolution XII.—It has been brought to the notice of this committee that a Muhammadan student named Shahidullah who had passed the B. A. Examination with Honours in Sanskrit was desirous of attending the University Lectures in Sanskrit for the M. A. degree. He was admitted to the class but subsequently the Sanskrit, Professor raised an objection to his presence in the class and he was excluded from attending the lectures on the ground that the sacred Sanskrit books such as Vedas and Upanishad should not be taught to Mlechas. He submitted a representation to the authorities concerned, but it was to no effect.

It is not at all comprehensible on what principle or policy the action of the University College authorities can be justified. The University Lectures are open to all without distinction of cast or creed. The Institution itself is the Government Institution and is maintained from the Provincial Revenue to which the Muhammadans also contribute. A particular Professor or an arthodox Pundit may have his prejudices but he is a public servant and draws his salary from the fund contributed by the Muhammadans as well. If he is scrupulous to a nicity he should not have accepted the post, or refrained from drawing his remuneration from a fund contributed by those against whom he has prejudices. It may be urgued that a Brahmin Pundit can not allow a person whom he calls Mecha to touch and teach Vedas. But this argument does hold water when one remembers that the Brahmin

Pundits do teach their sacred books to European scholars. Moreover, the European scholars have been more than once the Principles of the Sanskrit College without any objection on the part of the Pundits. In the present case, the Moslem student did not want admission to an institution exclusively set apart for the Hindu or Brahmin but to a Government institution which is open to all alike. It is a pity that in such an institution where the policy of religious neutrality pre-dominates, racial feeling and unreasonable prejudices in the name of arthodoxy have been allowed to play a part.

In connection with this, question, another important point arises for consideration. If the prejudices or religious scruples of an individual be allowed to prevail, the Muhammadam students will be for ever debarred from attending the University Lectures in Sanskrit. The Central Standing Committee venture to submit that it is neither desirable nor politic to shut the door of a particular branch of learning against a section of His Majesty's subjects. It goes against the very policy of the Government and creates a perpetual disability. The committee therefore earnestly requests the Government to remove the unjust and artificial bar from the way of Muslim graduates intending to attend the University lectures in Sanskrit.

the Principle of the Hooghly College that the Junior classes of the Hooghly Madrasah have been removed to a separate building, via to the Madrasah Hostel. Now the whole building was purchased out of the Mohsin fund for the benefit of the Moslem students. If they require more room for accommodation it should have been given to them in the building itself instead of removing the Junior Madrasah from the building in toto and utilising it for some other purpose. Looking to the intention of dedication, it can not be disputed that the Junior and Senior classes of the Hooghly Madrasah have a prior claim to be located in the endowed building itself to that of

the School Department which under the new Regulations is required to be removed to a separate building. Moreover, the Madrasah Hostel has been snatched away from the Madrasah students and the inevitable result is the heavy decline in the number of pupils. The Official Report for 1909-10 says -'The number of pupils in the Hooghly Madras in declined from 141 to 05 owing, it is said, to the proposal to use as a hospital the outhouses attached to the Madrasa Hostel in which a number of students used to live in previous years." The matter now stands thus-a considerable portion of the premises is occupied by the Principal, the Hostel attached to the Madrasah is used for holding the Junior classes, the out-houses attached to the hostel for the purpose of a hospital, and the major portion of the main building for the College classes and the school attached thereto. Under the circumstances it is not surprising that "the accommodation of the Madrasah itself, consisting as it does of three rooms and a Verandah in the Hooghly Collegiate buildings, is obviously inadequate." (vide Report for 1903-10 p. 47). The committee fails to understand why the whole building which was intended for the Madrasah should be used for the purposes other than that of the Madrasah in supersession of its claim for more accommodation in the main buildings:

It further appears that there is another school at Chinsurah, maintained by the Government at a considerable cost. This school is situated at a very small distance from the Hooghly Collegiate school. I may be permitted to point out that there is hardly any necessity for two schools, so close to each other in a small town like Chinsurah. This school and the collegiate school may be advantageously amalgamated into one. This suggestion, if found acceptable to the authorities will relieve the College fund from its financial strain to some extent and provide ample room for accommodating all the classes of the Hooghly Madrasah in the main building. Further accommodation may be secured by removing the Principal's quarters from the College premises.

Resolution XIV. In recommending this resolution to the acceptance of the Government the Central Standing Committee begs to point out that the object of the resolution is not to make the Superintendent absolutely independent of the Principal but so far the internal management of the Madrasah and the Hostel attached thereto is concerned he should have bower of initiative and control as is the case with the Super-Intendents of the Dacca and Chittagong Madrasahs.

Resolution XX. It has been brought to the notice of this committee that there are no adequate provision for teaching Persian and Urdu in the Government and aided schools in the Mofussil. In some of these schools there is no provision at all, such as the Government college and schools at Balasore, and Doulatpore and the aided school as Bongong. The Moslem students in such schools experience great inconvenience and their progress in the study of the 2nd language is greatly hampered for want of Persian and Urdu teachers. Mereover, under the New University Act Arabic has been made a compulsory subject along with Persian and unless competent Persian teachers are provided for in the Government and aided schools, the Moslem students placed as they are at a disadvantage, can hardly be expected to make any appreciable progress in the field of Higher Education.

The following extract from the last Annual Report of the Conference will throw some light on the difficulty under which the Muhammadan students are now labouring. It is a well-known fact that the majority of Persian Teachers or Moulvis as they are generally called, do not know English at all, consequently they are not at all competent to teach translation and composition to those whose and language is Persian or Arabic. There has, of late been a loud complaint about it and a pressing demand for English-knowing Persian teachers. In the case of students belonging to other races, translation and composition are taught to them by teachers who know English in addition to the vernacular or the and language of their

eupils but there is no such facility for Moslem boys. Moreover, in many schools and colleges, there are one or two Persian teachers only who are required to teach Moslem students from the lowest to the highest class. In such institutions the ill-paid Moulvis can hardly get time to devote more than half an hour to each class. Sometimes, they are compelled to take up two classes simultaneously and can teach neither class satisfactorily. There is another draw-back in the way of the Moslem students of Bengal proper and Orissa. English is taught there through the medium of Bengali or Urya in schools where the pupils learn from the very beginning the meaning of English words and phrases in corresponding terms and Idioms of their vernacular, and thus they conveniently come off well in their Examinations. But contrary is the case with Moslem boys who learn English through one vernacular and are required at their examinations to render English into another. These are no small drawbacks in the way of their higher education."

Resolution XXI. In connection with this resolution it may be pointed out that the attitude of the Indian Musulmans can be best ascertained from the following untrovertible facts with the regard to the Educational tax proposed to be levied in Mr. . Gokhale's Bill. Long before the introduction of this Bill into the Supreme Legislative Council, the Muhammadans of Sindh eame forward with a proposal for levying a tax upon themselves for the spread of education among the Muhammadans of Sindh (Punjab). The proposal was adopted in the form of a resolution during the Karachi Session of the All-India Muhammadan Educational Conference, A similar resolution was subsequently adopted during the sitting of the Provincial Muhammadan Educational Conference held at Bogra. And the same resolution was repeated in the District Educational Conference held at Comilla. Again during the Nagour Session of the All-India Educational Conference, a similar resolution was unanimously adopted: The echo of the aforesaid proposal was heard again

and again in the various meetings held by the Muhammadans during those years. The Muhammadans were then under the impression that the Government would not like their proposal of leaving an Educational tax on the whole country so they preferred to leavy the Educational tax upon themselves. The above facto-which are now a matter of record—indisputably and ministakeably show that the Muhammadans have been ready and willing to pay the Educational tax long before Mr. Gokhale conceived the idea of introducing the Bill into the Legislative Council.

The contrittee further begs to submit that since the introduction of the Bill, the opinion of the Moslem community is almost unanimous in support of its principle. There have been no doubt one or two dissensient voices raised against the bill, but their main objections appear to be more against its details than to its principle. Leaving out of the account the opposition of a few who apprehend scarcify of menial servants or the half-hearted support of those who are not certain whether the Government is against the Bill, or in its favour, the Moslem public opinion seems to be unanimous.

It has faintly been suggested in certain quarters that the measure will not find favor with the mass. As fur as this committee has been able to ascertain the feeling of the Muhammadan public in respect of the Bill, there hardly exists any ground for such apprehension. On the other hand if the Bill be passed into a law, it will be hailed with enthusiasm in the Muhammadan community. What the Muhammadans want, are the safeguards as regards the special requirements of their community. This committee therefore to accord its full support to the principles embodied in the Bill.

WAHED HOSSAIN, (B.L.)
Secretary, P. M. E. Conference, Bengan

EDUCATION AND THE THEOSOPHICAL SOCIETY

[The article which led to the calling of the Educational Conference at Benares, on December 31st, 1909. By G. S. Abundale, M.A., LL.B., Principal of the Central Hindā College, Benares City.]

To the earnest member of the Theosophical Society, who utilises his membership to widen and improve his sphere of activity rather than to confine its benefits within the narrow limits of his own individuality, no department of life can appeal with such irresistible force as that which concerns the instruction of the young. The Theosophical Society of the present day is but the body out of which will be born the Theosophical Society of the future, and out of whose present constitution will be formed the heredity, not only of its own children, but of kindred movements which may claim it as their progenitor. Just as we of the present generation may look to our bygone ancestors for many of those tendencies and qualities which help to make us what we are to-day, so will the organised efforts of the future, in the direction of those three objects which distinguish the modern Theosophical Society, depend to a certain extent-perhaps to a large extent-upon the mould our present members offer to the spiritual Life which is ever seeking to take shape where it can find expression and where it can shine forth with the utmost purity.

We are now at the threshold of a period of increasing possibilities in the direction of spiritual advancement. A time is coming in which opportunities for service to humanity will be multiplied, if there are those in the world ready to seize them, if there are those whose karma permits them to receive the help on their evolutionary path which such opportunities offer. Perhaps the majority of us may not live long enough to witness, far less to take part in, the opening of the new cycle, Mrs. Besant has termed it. Most of us, again, may not have won the right to that rapid re-entry into physical conditions which would bring us into physical relationship with those world-forces which are to mark the coming era. But the glory of work and service consists as much in the sowing of the seed as in the reaping of the harvest; shall the husbandman refuse to sow the seed in the field because he is to die before the corn is to be gathered for the feeding of the hungry; shall he complain that his lot is hard because his is the toil, and to others it is given to benefit therefrom? Small of understanding indeed would he be, and littlewould he realise that his veritable reward lies in that which he attempts and not in that which he accomplishes. To those Great Ones, whose span of sight covers periods which are but as dreams to mortal man, all times are times of sowing and all times are times of reaping. They look with equal gaze upon the toiler in the ground which is hard and rough and which needs much labor to bring forth little result, and upon him who has but to scatter the seed to reap a rich return. To each will

be credited the effort that he makes, and the result will be measured in the terms of the struggle which has called it into being.

Let us therefore be glad that we are privileged to be the precursors of the cycle which is about to dawn, and that to us is given the power by our actions in the present of hastening or retarding the advent of that greatest prize to which humanity can for the time being aspire—the opening up before it of a shorter pathway to its goal. Let us leave the future to take care of itself, for it is in far safer hands than ours, and let us try to see as clearly as we may the work that lies before us; for true it is that our own future depends largely on the use we make of our faculties and energy in the work immediately in our hands.

What then is the nature of this work, what can we do to help? Throughout the world—as even the ordinary newspaper reader may observe-men's energies seem directed towards the understanding and improvement of social conditions, using the word 'social' in its widest sense. The individual is gradually broadening his sympathies, he is slowly beginning to recognise that his own happiness depends upon the welfare of others, and that his own progress is bounded and limited by the conditions in which his fellow-creatures live. So is it also with the small community, for sects and factions find that strength and success are not so much to be found in the imperious insistance on narrow dogmas as in the recognition of an all-embracing truth. So is it too with nations, which are beginning to see in harmony the key-note to prosperity. In other

words the thought of a common humanity is forcing itself into the minds of the leaders of the people; and through them it slowly but surely pervades the masses of men to whom it will mean much; and if at present we have not yet passed beyond the stage expressed in the term "blood is thicker than water," we may be thankful even for that, and may see in the signs of the times a greater phrase for the greater thought: "The one Life is more binding even than blood." It would be tedious to the reader, and, I think, unnecessary, to detail the various features of modern life which point to the existence of this new spirit. Rather is it for us to draw the moral, and to form our activity in accordance with the principles it involves. "Coming events," it has been truly said, "cast their shadows before," and in these movements, in these new activities, in these strivings after a new life, we, who may not, perhaps, be destined to participate in the great events, may at least recognise their shadows, look down the dim distance, and make faintly for ourselves an image-however imperfect—of the future destinies of mankind. And with these 'shadows' which are our substance may we hope to help in preparing the young generation for the work which, in its turn, it will have to perform. Education, then, is of paramount importance at the present juncture, for if it be true that we are indeed at the opening of a new cycle, then it is surely equally true that the value of that cycle to the world will depend upon the part which its generations of mankind play in using its opportunities to the utmost, and in so drawing

upon the spiritual life thus offered that no portion of that life must be returned to its source to await new vessels for its reception. Understanding this, those who are able to sense, even vaguely, the needs of the future and the conditions under which the utmost good may reach the greatest number, will do well to think carefully of the lines along which the education of the young should proceed in order that they may be prepared for the work in which they are destined to take part.

What are the characteristics of these shadows. which are but the reflexions of that which is to come? One characteristic stands out prominentlythe gradual recognition of an underlying unity linking the many diversities. This means a widening toleration, a broader sympathy and increased trust and co-operation. These, then, are the principles which we should strive to make prominent in the young generation, and in order to achieve success we have to look carefully to the educational system from the point of view of our knowledge of future conditions. We cannot expect the average parent to understand his son's destiny or his son's opportunities; still less can we hope that the paramount importance of the education of the future mothers will be adequately realised. But those who appreciate Theosophical teaching, and those who in any way work -in whatever movements they may take partfor the future and not only for the present, have the burden laid upon them to train the youth of the country along those lines which in the long run will be most beneficial to the race and to humanity as a whole. I would urge, then, upon every member of the T. S., for I am mainly addressing T. S. members through Theosophy in India, not to let this year pass without trying to vitalise the educational movements throughout the country. Wherever there is a school or college which depends for its existence upon the co-operative spirit of the people, in which ideals—of whatever kind—form the basis of the educational activity, T. S. members are bound to extend a helping and encouraging hand. Such institutions are always grateful for sympathy of a practical kind, and this sympathy must not be asked for in vain from branches of the T. S.

In places in which such institutions do not exist. and in which toleration is not a feature of those which do exist, an earnest effort must be made to start a small school, whose peculiar feature shall be that masters, boys, committee, all learn to look to one another for mutual interest in the working and progress of the school. Especially is it necessary that the students should be taught to help in conducting, as far as their powers permit, the affairs of the institution, each contributing according to his capacity. Associations and societies of all kinds are to be brought into existence aiming to draw out virtues which seem to be the signs of the coming era. Some may languish, some may fail; experience alone will show what form of activity is best suited to the conditions which obtain in the surroundings of the school. But if one alone succeeds, a foundation is laid upon which may be built a useful contribution towards the great structure which is to contain the new life. It is impossible in this

article to enter into details, but with the knowledge that has been given us much of preparation may be begun here and now, and though we may be scoffed at by the old-fashioned, though we may be regarded as visionary enthusiasts out of place in a practical world, we may console ourselves with the thought that at least our eyes are open, our aims are sincere, and our vision perhaps a degree more clear than that of those who see but the advantages of the immediate present. It would be well if in this coming Convention of the T. S. at Benares, a little time be set apart for a serious consideration of the educational problem, and for an effort to be made to make the coming year a of far-sighted preparation of those young souls whose karma it may be to share in the inauguration of a new epoch of progress and of service.

THE EDUCATION CONFERENCE

Benares, December 31st, 1909 EDUCATION IN INDIA

RY

PCBŅENDU NĀRĀYAŅ SINHA, M.A., B.L. Bānkipār, Bihar.

THOUGH education follows practically the same lines in all countries and at all times, the aims and ideals have been more or less different in different systems of education. The difference has been so great at times as to produce different types of national character. The cultured Greek, the selfsacrificing, patriotic Roman, was each the product of his own system of education. In the West, one ideal after another has been tried and followed more or less exclusively, and different systems of education have come out with marked difference of result. In the East, however, all ideals have been sought to be harmonised in the education of a single man. There are imperfections in the western, as well as in the eastern system, and a judicious blending of the two must be the work of the future.

Plato maintained that education must nurture every inherent potency, bringing all the faculties of the individual together into a harmoniously developed whole, that it must "give to the body and to the soul all the beauty and all the perfection of which they are capable".

This view has largely influenced many educational systems in the West. It has there been the aim

of education to bring out the latent capabilities of man. Even Rousseau's system is largely based on this ideal. And in later times, it has been the foundation-stone of Froebel's well-known system of Kindergarten. The conception has found a most poetical expression in Browning's Paracelsus:

It is this "wall upon wall" that require purification to let out the light within.

The West, in time, put another construction on-Plato's ideal of education. According to this western critic, the view of Plato "regards man on his spiritual side as an entity set apart from every thing else in the universe, and possessing powers and attributes which find their raison d'être in simple existence as ends in themselves".

Another ideal was found in the writings of Aristotle. According to Aristotle, education should help each individual to attain the highest degree of happiness by living a virtuous life as a citizen of a virtuous state. Lawrie says: "We are struck by the modern spirit of Aristotle. The cultured and

harmonious man is not an object of concern with him, but only the capable and virtuous citizen." This so-called practical view of education has found scientific expression in the modern biological view, of which Herbert Spencer is the pioneer. According to this view, an individual's well-being is at all times conditioned by the forces operating in his environment, and education must prepare him en rapport with these, and turn them to profitable account.

The educational system of ancient India is at once one of disciplined Unfoldment and of Adaptation to the environing world.

Disciplined unfoldment is the guiding feature of the individual's education up to his marriage, and adaptation is the guiding feature of his post-marriage education. The Brahmachari carried with him a formed and well-trained character and was wellgrounded in all the relations of life, when he entered into the life of a Grhastha, or householder. The Indian student was not a monk all his life, but had all the training of the cloister at an early part of his life. He had never however the training of the castle. He was trained neither to be rude to women, nor to deify them. His training was thoroughly practical. He was trained to look upon his wife as an essential partner for the performance of those duties that he had learned in the early life of a Brahmachari. Both Idealism and Realism were harmonised in the Indian student's education. Materialism was there, but it was the materialism of a dutiful man, whose whole life was the life of sacrifice, or Yajna, and not the materialism of a

grasping, self-seeking man. Spiritualism was there, not the spiritualism of a coward, that flies away from his environments to find out a safe harbor for himself; but it was the spiritualism of a fighting hero, who struggles every moment of his life to make his environments happier, better and more harmonious. He who looks to the Self within as cut off from the universe is a visionary. He who looks only to his environments, to the universe outside, for his education and guidance, neglecting the Self within, becomes a ship without a rudder, a creature of circumstances, blown about by every passing wind. Real education requires a binding force between Man and his surroundings, and that force Religion, literally and substantially. Religion means a continual adjustment between the Self and the Universe; and if it requires a well-regulated and disciplined unfoldment in the first instance before actual contact with the environment, it is because theory must precede practice, it is because the sinews must be strengthened before the actual fight, it is because Sankhya must hold the reins of Yoga and give it direction. "Foolish are they who say Sankhya and Yoga are different; not so say the wise." The modern biologist, in trying to draw æsthetic culture from Nature outside, and to seek the evolution of the highest sentiments in man, of his best emotions, asks: "What end have we in view?" and ends by answering: "Always that conduct may be so ordered that one may be kept in contact with influences that heighten the tide of life, that increase the sum total of health-giving influences—ethical, intellectual, physical, and that

destructive, pain-giving forces may be avoided." (O'Shea.) But the influences are diverse, the interests are conflicting. What is the all-guiding, binding force that makes the influences co-ordinate with one another to produce harmonious relations all round? Religion gives that force by preaching the basic unity of all men, nay, of the whole creation. "That thou art," taught the father of Shvetaketu, thousands of years ago, and the Initiate Paul earnestly exclaimed: "For ye are dead, and your life is hid with Christ in God."

It is upon this unity of all beings that Religion is based in India, and so is Education. Education is religious, and Religion is educational. Education based on Religion is the most scientific, for Religion is the highest Science. Psychology is a most important element in the science of education, and there we find how psychology unconsciously glides into Religion.

How Psychology and Religion Mret Together

Western psychology, as a science, is still in the making. It has, however, been the fashion to analyse the mental powers into knowing, feeling and doing. Whether these be the powers of the mind, or whether Ichchhā (will), Jūāna (knowing) and Kriyā (doing) be the powers of the conscious Self, is a matter of no consequence for the purpose of this paper. The course of evolution is towards the harmonious perfection of these three powers. We may know what is right, but may not have sufficient strength of will to carry it into action. Again we may have the will to do what is right, but may not

know what is right. Will and knowledge again may fail for want of appropriate action. Education in the highest sense is the all-round, harmonious development of the three powers. Will is developed from within, as an expression of the Self in man. Knowledge is developed by cultivating the relations of the Self with the universe. Action constantly adjusts the relations between the Self and the universe.

Push on the three powers to the utmost limit of their capacity in the universe, and you get the conception of Logos, or Ishvara. According to the Upanishats, Ishvara first willed: "One, I shall be many." He had a perfect knowledge of what that manifoldness was to be. And He brought forth that manifoldness in the creation of this universe. We also build up things in our own way. But our knowledge is limited, our action defective, and our will is that of a fallen degenerate self. The object of education according to the eastern ideal is therefore to raise the self, to extend the sphere of knowledge to all that is knowable in this universe; and to teach action, which develops all the faculties of man and all his senses, and removes all barriers that come between the Self and the perfection of his powers. It is through this ideal that psychology and religion meet each other, and it is through this ideal that education embraces them both.

How FAR THE IDEAL IS CONSISTENT WITH PRACTICAL EDUCATION

Mr. Fraser in his thoughtful pamphlet on education says: "Hindus, for instance, have in the Sanatana Dharma Series the moral ideals of the past arranged in a convenient form by trusted members of their own community. It would be worth their while to consider how far this teaching meets the needs of the laborer, the clerk and the shop-keeper; the engineer and the merchant; the soldier and the civilian official. This would show how far it meets the needs of Schools, which have to produce such men."

History has to some extent answered this question. Religious education, or education based upon religion, is not a new thing in India. It is as old as the Āryan immigration itself. And we have to see what that education was capable of in the palmy days of Hindū civilisation. Coming down to troubled times, when other streams affected the results, we have still historic evidence. A number of quotations is brought together by Professor Max Müller in his India, what can it teach us?

The following quotation is from Prof. Wilson:

"I lived, both from necessity and choice, very much amongst the Hindus, and had opportunities of becoming acquainted with them in a greater variety of situations than those in which they usually come under the observation of Europeans. In the Calcutta Mint, for instance, I was in daily personal communication with a numerous body of artificers, mechanics, and laborers, and always found amongst them cheerful and unwearied industry, good-humored compliance with the will of their superiors, and a readiness to make whatever exertions were demanded from them: there was among them no drunkenness, no disorderly conduct,

no insubordination. It would not be true to say that there was no dishonesty, but it was comparatively rare, invariably petty, and much less formidable than, I believe, it is necessary to guard against in other Mints in other countries. There was considerable skill and ready docility. So far from there being any servility, there was extreme frankness, and I should say that where there is confidence without fear, frankness is one of the most universal features in the Indian character."

Arrian, speaking in the second century of the public overseers or superintendents in India, says:

Idrisi, in his history, written in the eleventh century, says:

"The Indians are naturally inclined to justice, and never depart from it in their action. Their good faith, honesty, and fidelity to their engagements are well-known, and they are so famous for these qualities that people flock to their country from every side."

Marco Polo, writing in the thirteenth century, thus speaks of the Brāhmaṇas: "You must know that these Abraiaman are the best merchants in the world, and the most truthful, for they would not tell a lie for anything on earth."

Abul Fazl says in the sixteenth century in his Ayni Akhari: "The Hindus are religious, affable, cheerful, lovers of justice, given to retirement, able in business, admirers of truth, grateful and of unbounded fidelity; and their soldiers know not what it is to fly from the field of battle."

Quotations like these, which may be multiplied to any extent, show that the religious education given in the East produced the best warrior, the best merchant, the faithful officer, the honest man of business, and the most honorable citizen.

The ideals that in the past formed character, which is the foundation of all worldly success, cannot fail to be equally effective in the present. The ideals did their best in the most trying times, and we have an unbroken record of Indian character and Indian efficiency till comparatively modern times, though affected a good deal by revolutionary changes in the surroundings.

Constant, unremitting action is the teaching of Shri Kṛṣḥṇa, only the action is always to be guided by a sense of duty, by an understanding of the laws of life and the nature of the Self, and not by selfish motives and the promptings of self-seeking desire. Duty to surrounding lives is to be the spring of all actions.

The teaching was pointedly illustrated by popular stories in the Rāmāyaṇa and the Mahābhāraṭa, and still later in the Purāṇas. And a community grew up of dutiful men, honest citizens, faithful workmen, resourceful merchants, reliable traders, and devoted workers in all the fields of labor.

COMMUNISM IN THE EAST

More than all that, there was a most delightful communism, an outcome of the religious teaching of the East. Charity was as common and as spontaneous as the breathing of man. How could it be otherwise, when Shrī Kṛṣhṇa taught: "He who cooks food for himself and does not give it to others is a thief." Even now, when India is so poor, there are no poor-houses, and no State relief except in famine years. Fahian's description of Pātalipuṭra shows to what length private liberality went in ancient India.

"The inhabitants are rich and prosperous, and vie with one another in the practice of benevolence and righteousness. The heads of the Vaishya families in these establish in the cities houses for dispensing charity and medicines. All the poor and the destitute in the country, orphans, widowers and childless men, maimed people and cripples and all who are diseased go to these houses and are provided with every kind of help, and doctors examine their diseases. They get food and medicines which their cases require, and are made to feel at ease; and when they are better, they go away of themselves." There was a spirit of willing communism all round, the rich cheerfully giving away their wealth to the poor and the needy, and the poor willingly and

ungrudgingly serving the rich. Broad sympathy is the characteristic virtue of the East.

Look to the West. Dr. MacDonald, the Editor of the Toronto Globe, and one of the delegates to the Imperial Press Conference, draws the following picture of the British masses: "Frankly, the thing that impressed me most, the thing that stands out as the back-ground of reminiscence, was the bloodless, mirthless, hopeless, face of the common crowd. Nothing seems able to dim or wipe out or soften the hard lines of that impression. The dress receptions, the gorgeous pageants, the galleries, the colleges, the storied castles, and all that rare procession of beauty and wonder and worth may fade into a dream-like memory, but the pale and sunken faces of the nameless city crowd haunt one like a weird." Is it then strange that Socialism has sprung up in no welcome form in the West, and that the social fabric is tottering there before the onslaughts of this monster? If, therefore, you make West of East, by depriving her people of religious by pushing the present secular education, and education to its farthest limits, you will produce such a phenomenon in the East.

SEXUAL LIFE AND THE TWO SEXES

Take another feature of education—its control over the sexual life, its regulation of the relations between the two sexes, and its prevention of sexual abuses. That the student should live a Brahmachārī's life was an axiomatic truth in the days of Manu.

What is this Brahmachari's life? The tender mind of the boy, in entering the student's life, is

impressed with the idea that he is entering a second life as it were, a life of purity to be passed at the teacher's feet. He is given a sacred formula which he is to recite every morning and every evening, and thus create protective holy vibrations round him. He is to regard the sun and the fire as emblems of life and purity. If the ascetic fire fails him, he is to draw in fresh life, as it were, from the sun and fresh purity from fire, and to strengthen the force of the sacred formula by constant repetition. The sacred formula becomes in time a power in the student's life, and helps him immensely in the development of will-power. While he gains ascetic power (and it is comparatively easy to gain it at a young age), the teacher gradually unfolds to him the duties of a householder, the duties of married life, and the indispensable help of the wife performing those duties. When the student becomes a householder, he knows the value and position of his wife, and the two remain bound in indissoluble ties of duty and affection.

The Westerner has been trying system after system in this all-important matter.

At one time, there was too much isolation in English boarding schools, and boys were encouraged in early youth to think of girls with indifference and contempt. Some now take an early opportunity to explain to the boys the evils of all bodily abuses. Then there is the tentative system of coeducation. In none of these systems, is there the regular, systematic training of the boy's nature, the education that at once prevents abuses and produces

moral grandeur, the education that combines the cloister and the household. The co-educationists may be far in advance of their time, but I do not think the time has yet come for giving the system a trial either in the East or in the West.

WHAT IS TO BE DONE IN INDIA?

There is much in the western system of Education which we should accept, and there is much in the eastern system which we afford to lose. The West should not force itself upon the East, but it should be assimilated in time, and the power of assimilation is great in the East. The purely secular education, with its materialistic taint, that has been dominant in our Universities for more than half a century, has shaken our social fabric to its very foundations. A system that has lasted for centuries, that has got in itself features that may be copied with profit by all the other existing systems of the world, cannot be so lightly brushed aside. And the essential feature of that system is education founded on religion. In the present system of education, religion has been divorced from education long enough to enable us to see what the effect is on our boys, on their guardians, and on society in general.

Please do not carry on the experiment too far.

If the fabric falls down altogether, chaos will be the immediate result, for you cannot easily construct another West in the East.

The objection that our Government is alien does not hold good. The Government has been too long in the land to be called alien. The days of

aggressive religion are now happily over, and religions honestly try to understand each other. When Muhammadanism had been sufficiently long in India. Prince Dara Sukoh, son of the Emperor Shah Jehan wrote that priceless work, Majmuaul Bahrain, "the union of the two streams" in India. And is not the time now sufficiently advanced to write a work on the union of all the great religious streams? There may be denominational schools like the Central Hindu College at Benares or the Muhammadan Institution at Aligarh, But our schools may safely provide for the religious education of different sects, and the experiment is being already tried in some private institutions. There is nothing in against the policy and spirit of toleration. Religions tolerate their rivals in India, and are prepared to walk side by side. In the Female Training College Bankipur, the Muhammadan and Hindu subcommittees made a joint requisition to Government for the religious education of the Hindu and Muhammadan girls. The Muhammadan Educational Conference at Burdwan has emphatically declared in favor of religious education, and the President of the Conference said that morality divorced from religion was an anachronism. Lord Minto has emphatically declared himself in favor of religious education, and has impressed upon the Ruling Chiefs the necessity of introducing it in their States, and Ladv Minto has said the same thing no less emphatically in her address to the Begum of Bhopal. But so far as British India is concerned, a question has been raised by His Excellency which requires careful consideration. His Highness the Mahārāja

of Alwar, in addressing His Excellency, spoke with earnestness of the need for more moral and religious education especially in the Lower Standard His Excellency replied in the following words: "Your Highness is very right in saying that the success of the future will largely depend upon the direction and control of education. subject is a very big one, far too serious to discuss on an occasion such as this, but I agree that it would be fatal to the upbringing of the coming generation if the noble principles of religious and moral training, which go to form the character of nations, should be lost sight of in an exaggerated competition for the brilliancy of mere literary attainment. But the direction of early religious training must rest largely with the people themselves. I hope they will not lose sight of it. It is one of those problems in which it seems to me the Rulers of Native States can do much to assist their countrymen. They have internal administration in their own They can establish an educational control which a British administration of a different race and creed could not dare to inaugurate. They know and can sympathise with the traditions and forms of worship of their own people, they can attempt to direct and to influence the principles of education in realms into which the Government of India would be very wrong to intrude, but where the infinite mischief of the loss of religious guidance in early youth is already becoming more and more evident.

The remarks of His Excellency must be carried to their legitimate sequence. If, after all, Government

The Italics are mine.

thinks it would be wrong to intrude into the realms of religious education, it has a clear duty to the people. Government is bound to allow Universities to be organised by the people themselves, for imparting religious education to their sons. Government is bound to encourage and help private enterprise in this direction. The patronage and guidance of the Indian Ruling Chiefs will be welcome in the formstion of Indian Universities, and Hindu and Muhammadan Chiefs may very well take personal interest in the character of religious education imparted to their co-religionists. If our Government will have nothing to do with the guidance and control of religious education, it can leave that part of the work to independent sub-committees in every University, with powers to be controlled by a Board of Ruling Chiefs, if you like.

The signs of the time are clear and manifest. The awakened conscience of India rejects the purely secular education given in our Universities; and whatever be the condition under which religious education may be introduced there, the fact remains that, till such an introduction is made, our present educational system must be characterised as unsound, incomplete and even dangerous.

A REVIEW OF THE MODERN SYSTEM OF EDUCATION IN INDIA

RY

M. Subramania Iver

Rangoon, Burma.

Education in India, in the modern sense of the word, may be said to date from the year 1854, when the Court of Directors, in a memorable Despatch, definitely accepted the systematic promotion of general education as one of the duties of the State, and emphatically declared that the type of education which they desired to see extended in India was that which had for its object the diffusion of the arts, science, philosophy, and literature of Europe; in short of European knowledge.

The acceptance of this duty was an important departure in policy. The advent of British rule found in India systems of education of great antiquity existing among both Hindus and Muhammadans, in each case closely bound up with their religious institutions. To give and to receive instruction was enjoined by the sacred books of the Brāhmaṇas, and minute details were laid down as to the routine to be followed in committing a text-book to memory. Schools of learning were formed in centres containing a considerable high-caste population, where Paṇdits gave instruction in Samskṛt grammar, logic, philosophy and law. For the lower classes, village schools

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were scattered over the country, in which a rudimentary education was given to the children of traders, petty land-holders, and well-to-do cultivators. The higher education of Muhammadans was in the hands of men of learning, who devoted themselves to the instruction of youths. Schools were attached to mosques and shrines and were supported by State grants in cash or land, or by private liberality. The course of study in a Muhammadan place of learning included grammar, rhetoric, logic, literature, jurisprudence and science. Both systems, the Muhammadan no less than the Hindu, assigned a disproportionate importance to the training of memory, and sought to develop the critical faculties of the mind mainly by exercising their pupils in metaphysical refinements, and in fine-spun commentaries in the meaning of the texts which they had learnt by heart.

The first instinct of British rule was to leave the traditional modes of instruction undisturbed, and to continue the support which they had been accustomed to receive from the Indian Rulers. The Calcutta Madarasa for Muhammadans was founded by Warren Hastings in 1782, and the Benares College for the Hindus was established in 1791. Provision was made for giving regular assistance to education from public funds by a clause in the Charter Act of 1813.

The grant was at first applied to the encouragement of the oriental method of instruction by paying stipends to students. But the presence of the British in India brought about profound changes in the social

and administrative conditions of the country; and these in their turn reacted on the educational policy of Government. The impulse towards reform came from two sources: the need of public servants with a knowledge of English, and of Vernacular education as well, which was carried on by the missionaries in the early years of the nineteenth century. The well-known Minute written by Lord Macaulay (at that time Legal Member of Council and Chairman of the Committee of Public Instruction) in 1835 marks the point at which official recognition was given to the necessity public support of western education. followed a period of attempts, differing in different provinces, to extend English education by the establishment of Government schools and colleges, and by strengthening the indigenous schools; while missionary effort continued to play an important part in promoting educational progress.

In the despatch of 1854, the Court of Directors announced their decision that the Government should actively assist in the more extended and systematic promotion of general education in India. They regarded it as a sacred duty to confer upon the people of India those vast moral and material blessings which flow from the general diffusion of useful knowledge. They hoped by means of education to extend the influence which the Government was exerting for the suppression of demoralising practices, by enlisting in its favor the general sympathy of the Indian mind. They also sought to create a supply of public servants to whose probity offices of trust might, with increased confidence, be committed, and to promote the material interest of the country by stimulating

its inhabitants to develop its vast resources. The measures which were prescribed for carrying out this policy were: (1) The constitution of a Department of Public Instruction; (2) The foundation of Universities at the Presidency towns; (3) The establishment of training schools for teachers; (4) The maintenance of the existing Government colleges and schools of a high order, and the increase of their number when necessary; (5) Increased attention to all forms of Vernacular schools, and finally (6) The introduction of a system of Grants-in-aid, which should foster spirit of reliance upon local 8 exertions, and should, in course of time, render it possible to close, or transfer to the management of local bodies, many of the existing institutions.

The policy laid down in 1854 was re-affirmed in 1859, when the administration had been transferred to the Crown. The Universities of Calcutta, Madras and Bombay were incorporated in 1857, and those of the Panjab and Allahabad in 1882 and 1887, respectively.

Shortly afterwards a considerable devolution of the management of Government schools upon Municipalities and District Boards was effected, in accordance with the principles of Local Self-Government then brought into operation. From the effects of the present system of Education in India, we now find that it has gradually developed itself into a commercial concern of a purely utilitarian character. There is no seeking after education without a material self-interested motive. Knowledge for its own sake is no more the ideal of the candidates who seek after

learning. Though none of us are whole-hearted admirers of our present day education, yet we cannot deny that it has done much good to Indian youths.

What is the function of Education? "How to live" says Herbert Spencer, "that is the essential question for us. Not how to live in the mere material sense only, but in the widest sense. general problem which comprehends every special problem is—the right ruling of conduct in directions under all circumstances. In what way to treat the body, in what way to treat the mind, in what way to manage our affairs, in what way to bring up a family, in what way to behave as a citizen, in what way to utilise those sources of happiness which Nature supplies-how to use all our faculties to the greatest advantage of ourselves and others-how to live completely? And this being the great thing needful for us to learn, is, by consequence, the great thing which Education has to teach. To prepare us for complete living is the function which Education has to discharge; and the only rational mode of judging of an educational course is to judge in what degree it discharges such function." Real Education is the formation and training of the mind and character. Hard, patient and independent thinking and work are required in training the mind and forming the character. The mere acquiring of a bundle of facts which a student neither digests nor assimilates is training at all. They do not nourish his mind. One must naturally ask the question: Does our Educational course prepare us to live completely? Our emphatic reply is: No, it does not discharge its proper function to our entire satisfaction.

Now let us consider some of the subjects taught in our schools and colleges and see what are their relative value. I have no time to go into every one of them and I will therefore touch on a few. First let us consider the study of languages in our schools. Besides our mother tongue, we are made to study English as a compulsory subject. There is no alternative but to do so. Our Vernacular languages as vehicles of thought or instruments for acquiring knowledge are comparatively very imperfect and out of use, so we are obliged to acquire a tolerably good knowledge of English before beginning to learn useful arts and sciences. This is one of the drawbacks of our Education. We are to prosecute our studies in a foreign language and so our progress is bound to be slow; but it cannot be helped. Of all the subjects taught in our schools and colleges our Vernaculars are most neglected, and besides there is not much scope for further development of this second language when the student leaves the school. A graduate of ten years' standing, somehow or other, manages to forget even the A. B. C. of the so-called second language.

Take History; why should we stuff the brains of our school children with useless, uninteresting and sometimes demoralising details of wars? The first impression of such a study on our juvenile minds is that human beings are one another's enemies. They are capable of doing nothing but quarrelling with their neighbors. Slight, insignificant causes

are sufficient to provoke bloodshed and disastrous The juvenile mind naturally concludes that might, and might alone, rules the world. Grown-up men and women may learn these facts with advantage; but are we justified in teaching this sort of history to our children? I do not mean that we should belittle the importance of historical study in general. History should be the teacher of mankind. If it does not become so, the blame rests partly with those who teach history and partly with our text books. If we examine the text books prescribed for examination we see a good number of pages are devoted to the narration of wars. Such facts neither illustrate the right principles of political action, nor throw any light upon the science of Society, nor have they the remotest bearing on any of our actions. We wish that our children should learn the natural history of Society. History should be reduced to a science, and the narrative merely cited in exemplification of the principle.

The other day I was asked to examine the fourth standard girls of our school in geography, at the annual examination. The notes given to these children included a statement that the birth-place of the Āryans, was Tibet, and that 3,000 years ago they emigrated eastwards into China and southwards into Āryāvarṭa. When I made enquiries where the information was obtained, they showed me a text book in English, and this happened to be a text book recognised for use in primary schools by the Educational Department.

Elementary mathematics should be taught in all schools. The course prescribed for our Matriculation

examination, if intelligently gone through, is just sufficient for an educated man to know. Those who have no special aptitude for mathematics should not be made to waste their time and energy in cramming the theories of higher mathematics.

True science and true religion, says Professor Huxley, are twin sisters, and the separation of either from the other is sure to prove the death of both. Science progresses exactly in proportion as it is religious, and religion flourishes in exact proportion to the scientific depth and firmness of its basis. If there is any subject of vast importance which has not been given a proper place in our education, it is Science. It is true that through the beneficence of that broad-minded, sympathetic and public-spirited man, the late Mr. J. N. Tata, the Scientific Research Institute has just come into existence; but, we trust that the laboratory work connected with this institution will have nothing to do with experiments on living creatures.

It will take too much of our time if each subject is dealt with in detail, but this much is a recognised fact that, while trying to bring about a better relationship between the masters and their pupils, there is sufficient scope in the direction of improving our text books and our method of education. A Normal School to train teachers on national lines is, as much, if not more, a necessity if education on national lines is to succeed. Because other things being equal, the efficiency of teaching or training will vary in exact proportion to the efficiency of our teacher. Teachers should be well-trained on national lines, and a schoolmaster must have a

thorough knowledge of the subject he undertakes to teach. His moral character should be above suspicion.

Knowledge loses half its charm and more than half its value if it be not interesting. If the lesson be not made interesting by the teacher, there is no alternative for the student but to cram it. Where young people are taught as they ought to be, they are quite as happy in the school as at play, and are seldom less delighted, nay often more, with the well-directed exercise of their mental energies than with that of their muscular powers.

From the earliest days of British rule in India, private enterprise has played a great part in the promotion of both English and vernacular education. Now it has become a national cry to have as many private institutions as possible; to have indigenous methods of instruction; to have a comprehensive scheme of national education; to seek to satisfy the aspirations of students in the domains of learning and original research; to supply the Government with a succession of upright and intelligent public servants; to train workers in every branch of commercial enterprise that has made good its footing in India; to attempt to develop the resources of the country and to stimulate and improve indigenous arts and industries; to offer to all classes of Society a training suited to their position in life. It now rests with the people themselves to make a wise use of the opportunities that are offered to them and to realise that education, in the true sense, means something more than

the acquisition of so much positive knowledge, something higher than the mere passing of examinations, that it aims at the progressive and orderly development of all faculties of the mind, that it would form character and teach right conduct—that it is, in fact, a preparation for the business of life, a preparation for a spiritual life.

BURMESE SYSTEM

The education of the Burman in the monasteries even to-day gives us a typical presentment of what was aimed at by education in earlier days. After the boy has learnt the alphabets, his first text book is the Mingalasutta. It is a small Pālī poem of twelve verses, with a short preface. It is placed in the hands of the pupil and he is patiently taught the twelve stanzas, one after another. It runs as follows. A certain deity is said to have approached the Blessed One and addressed Him thus:

1. Many Gods and men, longing for happiness, have devised blessings; do Thou tell the greatest blessings. Buddha answered: 2. Not to follow the fools, but to serve the wise, to honor those that are worthy of honor; this is the greatest blessing. 3. To live in an agreeable land, to have performed good in a former existence, right aspirations for oneself, this is the greatest blessing. 4. Great knowledge and education, a well practised self-control and well spoken words, this is the greatest blessing. 5. To support one's parents, to protect child and wife, to follow a peaceful calling, this is the highest blessing. 6. To give alms, to live right-eously, to help relatives, to do blameless deeds, this

is the greatest blessing. 7. Ceasing from sin and abstaining from it, refraining from strong drink, earnestness in the performance of one's duties, this is the greatest blessing. 8. Reverence and lowliness, contentment and gratitude, the hearing of the law in due time, this is the greatest blessing. 9. Patience and meekness, visiting the monks, religious versation at the proper time, this is the highest blessing. 10. Temperance and chastity, insight into the Noble Truths, the realisation of Nirvana, this is the greatest blessing. 11. A mind unshaken by the changes of life, a mind free from passions and sorrow and secure, this is the greatest blessing. 12. Those who do such things are on every side invincible, everywhere do they walk in safety, and theirs is the greatest blessing.

When he has perfectly mastered the text, the meaning, and can recite them without hesitation, only then the most easy rules of grammar in connexion with this particular text are explained to him. The choice of this little poem was very happy indeed, for the Pālī of it is extremely simple, and it contains sentiments of a highly educative value, which could not but deeply impress the mind of the pupil at so tender an age. After this the pupil had to begin the second text, which is a small lyric composed in a moment of inspiration by the greatest expounder of Buddhism, Buddhaghosha. These two texts having been mastered and further excellence in reading and writing obtained, the pupil began the study of the Burmese classics.

The remark has often been made that the extension in India of an education modelled upon

European principles, and, so far as Government institutions are concerned, purely secular in character, has stimulated tendencies unfavorable to discipline, and has encouraged the growth of a spirit of irreverence in the rising generation. If any schools or colleges produce this result, they fail to realise the object with which they were established—of promoting the moral, no less than the intellectual and physical, well-being of their students. It is, therefore, absolutely indispensable that schools and colleges should be established on national lines, and should supply religious and ethical instruction to complete the educational training of their scholars. If this essential truth is overlooked or imperfectly appreciated, our labors to elevate the standard of education in our country and to inspire it with high ideals will assuredly fail to produce substantial and enduring results. The leaders of Indian thought, and the great body of workers in the field of Indian education, will, I trust, support this cause.

THE SCOPE AND FUNCTION OF PRIVATE ENTERPRISE IN EDUCATION IN INDIA

RΥ

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During the last twenty years a large amount of material on the educational system in India has been collected and provided by the Government. In the pre-British days there were systems education in India of great antiquity, both among the Hindus and Muhammadans, which were more or less connected with religious institutions; education in the modern sense commenced only half a century ago, when the Court of Directors announced that the Government should promote general education in India, and impart a knowledge of the arts, science, philosophy and literature of Europe. When the system of public instruction was organised, the indigenous schools in the country were helped by the Government, and were gradually modelled on the lines approved by the State. Education in English and in Vernacular was here and there imparted in institutions maintained by the different missionary societies, earlier than the creation of the system of instruction by the State. Later on, when the desire for western Education spread, colleges and schools were founded and maintained by Indians themselves on the State or Mission models. Thus, now, all institutions which

conform to the standard of efficiency prescribed by the Government, and follow an approved course of instruction are called 'public' institutions. 'public' institutions may be divided under four heads: 1. Institutions maintained by the Government, or District or Municipal Boards. 2. Institutions maintained by the missionary societies, which are either partially helped by the State or are unaided. 3. Institutions for the education of Europeans. 4. Institutions managed by committees which are non-missionary, and which receive either Government grant or are unaided. Over and above these institutions there are 'private' institutions, which are not recognised by the State, and which give only religious education, or combine some kind of secular education with it. It is difficult to get any complete or accurate information about such institutions, and thus a correct estimate of the entire educational activity in India is impossible. Then, again, it is not so easy to find out the condition of education in those parts of India which are governed by Indian Chiefs, each having a separate Department of Instruction of its own. The only materials that are available to a student of the Educational System in India are the . reports about the institutions recognised and controlled by the Departments of Public Instruction in ten different Provinces of British India, including Coorg.

Taking a bird's-eye view of the different stages of education in these Provinces, one finds that, so far as primary education goes, the number of scholars is gradually, though very slowly, increasing, but we are yet far far behind other important

nations of the world, as will appear from the proportion of children enrolled to the total number of the populations in India and in other countries.

In America the proportion is over 20 per cent.; in Germany about 20 per cent.; in England about 18 per cent. and in India only 1 per cent. Thus America is twenty times more advanced than India in primary education.

In secondary education there has been a marked increase, particularly in boys' schools of high stage, a rise of about 88 per cent. within fifteen years. This clearly shows that the spread of education is mainly confined to towns, and important villages with a large population.

The higher education has not of late been keeping pace with the growth of secondary education, and the slight increase in the number of scholars does not show that higher education is progressing, at least so far as quantity goes. When there were a hundred scholars in the high stage of secondary education, there were in 1896—7 in the Arts Colleges about 22, in 1901-2 about 21, and in 1906-7 hardly 17. Again, it is a mistake to suppose that a disproportionately large number go in for the University Education available in India. The Director-General of Education in the last Quinquennial Review of the progress of Education in India writes as follows: "It is sometimes supposed that the output of graduates from the Indian Universities is in excess of the number for whom there is employment: and indeed it is very common for persons who write about the social and political condition

of India to treat this supposition as if it were a demonstrated. fact, and upon it to build the theory that the pressure in the country of a large body of graduates seeking employment and finding none is the cause of some disorders in the State." we were to compare the state of higher education in this country with that in other countries we feel our own smallness. The number of University students per 10,000 of population in India is less than even 1, in the United Kingdom about 5, in Germany about 8, in the United States of America about 13. It should also be borne in mind that the standard of University education in countries is much higher than here, and a good deal of what passes for a University education, at least in the lower stages, is really covered by the curriculum in secondary schools in other countries; and thus if, for the sake of comparison, we were to take the statistics of scholars in the higher stages of University education in India, the average would be very much less than 1 per 20,000 of the population. The Arts Colleges that were rapidly rising in numbers are now dropping out, as is evident from the following:

1886-7	1891–2	1896–7	1901–2	1906-7
86	100	115	140	127

The rise in the number of scholars in the Arts Colleges has, during the last six or seven years, been very much less than in previous quinquennia, while the average of passes in the Matriculation during the last quinquennium is very much

higher than in the quinquennium preceding it. In fact, in the year 1906—7, of which the figures are taken, the number of Matriculates is about 20 per cent. above the average of the last quinquennium. This cannot be attributed either to the fact that young men now care more to join the Professional than the Arts Colleges, for where there were 100 scholars in the high stage of secondary education, there were in 1897 about 9 in the Professional Colleges; in 1902 about 7; and in 1901 about 6. The real cause seems to be the raising of the fees. The average annual fee per pupil has, within a decade, risen by about 18 per cent.

While taking a broad survey of the condition of education in British India I have dwelt at greater length on the decline of higher education than at first sight seems necessary for the purpose of this paper. I have done so because, while taking into consideration the scope and function of private enterprise, one cannot neglect altogether the duty and the policy of the State as regards education; and the results that we see in higher education typically illustrate the mistake of the policy adopted by the State in connexion with education in India. While discussing the question of the levy of fees in Arts Colleges, Mr. Nathen, in the fourth quinquennial Review of Education in India, explains the policy of the Government. He says: "The policy aims at rendering the institutions maintained aided by the State less and less dependent assistance from public revenues, and is also designed to secure greater efficiency and success in the privately managed institutions."

The resolution of Lord Curzon's Government on Indian educational policy lays down as follows: "The progressive devolution of primary, secondary, and collegiate education on private enterprise, and the continuous withdrawal of Government from competition therewith, was recommended by the Education Commission in 1883, and the advice has been generally acted upon. But while accepting this policy, the Government of India at the same time recognise the extreme importance of the principle that in each branch of education Government should maintain a limited number of institutions, both as models for private enterprise to follow, and in; order to uphold a high standard of education. In withdrawing from direct management, it is further essential that Government should retain a general control, by means of efficient inspection, over all public educational institutions." The question really resolves itself into this: "How far is it the business of the State to foster education among the people?" To this question different States have replied differently. In England, higher education is not supposed to be so much the business of the State as of the people; as regards secondary education, it is generally accepted that, as far as possible, it must be paid for at cost 'price; but so far as primary education is concerned, every parent has been given the right to obtain free education for his children, and the Government gives a special grant in lieu of fees to all schools. This has led practically to the abolition of the school fees. Germany, the entire cost of the Universities and the Polytechnics is borne by the State. In the second-

ary schools tuition fees amount in the aggregate to wery considerable sum, and are estimated at about one-third of the total income of schools. Primary educaion—unlike England—is not free, but the State's proportion of the total amount spent over primary education is about half. In America all public primary schools, a large proportion of public secondary schools, and nearly all State Universities are free. The policy of the Government of India is given in the Report of the Education Commission and Lord Curzon's resolution quoted above. But before discussing the merits and demerits of the policy of the State in India, it would perhaps be better to quote the views held by some eminent men in the West about the merits and demerits of the systems in England, Germany and America. Mr. Chamberlain once said: "In Germany, in America, in our own colony of Canada and in Australia, the higher education of the people has more support from the Government, is carried further than it is here, and the result is that in every profession, in every industry, you find the places taken by men and by women who have had a University education. And feeling as I do on these subjects, you will not be surprised if I say that I think the time is coming when Government will give more attention to this matter, and perhaps find a little more money to forward its interests." As a responsible minister, he had of course to speak with a certain amount of reserve. But another scientist, Sir Norman Lockyer, has more freely criticised the policy of the State in matters of education in England. He says: "Chief among the causes which

have brought us to the terrible condition of inferiority as compared with other nations in which we find ourselves, are our carelessness in the matter of education and our false notions of the limitations of State functions in relation to the conditions of modern civilisation. Time was when the Navy was largely a matter of private and local effort. this has passed away; for our first line of defence we no longer depend on private and local effort. Time was when not a penny was spent by the State on elementary education. But when we pass from primary to University education, instead of State-endowment we find State-neglect; we are in a region where it is nobody's business to see that anything is done. The German State gives to one University more than the British Government allows to all the University colleges in England, Ireland, Scotland and Wales put together. Do not our ministers of State know that other civilised countries grant efficient State aid, and further that private effort has provided in Great Britain less than ten per cent of the sum thus furnished in the United States in addition to the State aid? What are the facts relating to private endowment? In depending in our country upon this form of endowment we are trusting to a broken reed. We find that private effort during sixty years has found less than £4,000,000. While in the United States during the last few years more than £4,000,000 has been endowed." "To compete on equal ground with other nations we must have more Universities. Another crying need is of that of more professors and better pay. Another is the reduction of fees; these should be

reduced to the level existing in those countries which are competing with us—to say, one-fifth of their present rates, so as to enable more students in the secondary and technical schools to complete their education. The facts show that in England we cannot depend upon private effort to put matters right."

Of the merits and demerits of the German system, Professor Mach speaks as follows: "But how does it come, we must ask, that institutions so antiquated as the German gymnasiums could subsist so long in opposition to public opinion? The answer is simple. The schools were first organised by the Church; since the Reformation they have been in the hands of the State. On so large a plan presents many advantages. Means can be placed at the disposal of education, such as vate source, at least in Europe, could furnish. Work can be conducted on the same plan in many schools, and so experiments made of extensive scope which would be otherwise impossible. A single man with influence and ideas can under such circumstances do great things for the promotion of education. But the matter has also its reverse aspect. Educational competition is excluded, for all successful attempts at improvement are impossible unless undertaken or permitted by the State. the uniformity of the people's education, a prejudice once in vogue is permanently established. The highest intelligences, the strongest wills, cannot overthrow it suddenly. Many people affect the opinion of the ruling classes even against their better judgment, so as to abide on the same plane

of respect with the latter. Let us remember, finally that an influential Statesman, even within the boundaries which the law and public opinion set him, can do serious harm to the cause of education by considering his own one-sided views infallible, and in enforcing them recklessly and inconsiderately-which not only can happen but has repeatedly happened. The monopoly of education by the State thus assumes in our eyes a somewhat different aspect." Now what is the ideal placed before itself by the State in India. Put more plainly it divides itself into three heads: (1) That the State should, as early as possible, wash its hands of all kinds of education. (2) That the extent to which it should interest itself in education is to establish a few model institutions for private enterprise to follow. (3) But Government should at the same time retain control over all educational institutions. This ideal possesses many features of the system followed in England, minus two very important points: namely, the duty of the State to impart primary education to all children free, and secondly the independence of the ... Universities and action given to not only in name but in reality. So far as control of the institutions administration and go, such an ideal possesses the features of the system in Germany where educational progress is guided by administrative order, where keys of the position are in the hands of a strong central authority, where there is a strong tradition in favor of a direct State management, in fact all the disadvantages mentioned by Professor Mach minus

all that the State does for the growth and development of University and Technical education. The State in India expects the people to follow the example of America, so far as private enterprise and benefactions go, minus all that the State does itself by imparting almost the whole of the education under its control free to the people.

Speaking from this platform, I am really more concerned with what private enterprise should do than with the defects of the policy of the State in India; and my dwelling at length on the latter point might seem to be not only a digression, but also maintaining a position inconsistent with the object of this paper. I have done so, lest the advocacy of the extension of private enterprise might, in some quarters, be taken to be either an express or implied acceptance of the policy enunciated by State in India. I have done so also with a view to impress upon my countrymen the fact that as long as public opinion is not strong enough to influence the State to adopt a different and a better idea, the patriotism of the people should urge them still more to exert themselves to make up for the loss which the nation is bound to suffer from the mistaken policy of the State. While maintaining to the full the responsibility of the State to impart the cheapest and the best education to the people, bringing within its sphere of activity as wide area as possible, I beg to point out the urgent necessity of greater earnestness on the part of the people, and a wider extension of private enterprise than has hitherto been the case. There is always a scope for private effort, though it might not be very wide. Take the example of America, where in addition to all that the State is doing to afford every child an opportunity of receiving the blessings of education, private effort, is not a whit behind. Everywhere the communities maintain free primary and grammar schools. In the State of Massachusetts the communities maintain free high schools also. Private and endowed schools exist everywhere, and a number of the most celebrated secondary schools of the U.S. are endowed schools; so are the Modern Institutes (schools closely resembling the English Polytechnics). An experienced educationalist, while discussing the American ideals in Education, writes: "One of the most striking things in American life is the profuse, yet well considered, liberality with which wealthy citizens endow places of higher education. America is under heavy obligation to the far-sighted munificence of those who have created these new facilities higher education. The popular imagination has been struck by the magnitude of the gifts. The American people realise that Universities are now an essential part of healthy and efficient national life. Some of these princely gifts may have been due to a form of ambition. But this ambition is of a noble kind. Some may have been due to a sort of fashion. But it is highly creditable to American life that fashion should have taken such a form. Most of the gifts are probably due to a conviction of the urgent need for higher education in a democratic community. But this munificence, in endowing great centres of academic learning, is doubtless due in part to a deeper instinct still; namely, to a

belief that great endowments devoted to University teachings and research may hereafter guarantee, to certain types of learning and to some branches of science, a shelter of which they may stand in need." From 1871 to 1901 it is estimated that the total amount of benefactions to higher education alone has in the United States amounted to £40,000,000, or in terms of Indian money to sixty crores of rupees. In 1900, Mrs. Leland Stanford endowed three crores and thirty lakhs to the University named after her, and in 1902, Mr. Carnegie endowed three crores to the Carnegie Institution, Washington. This gives us a rough annual average of three crores as benefactions to only higher education in America. ing now to India we find that about ninety-seven laklis of rupees were spent on education in all its stages from private sources in the year 1906-1907. Deducting from this figure the amounts relating to European education and institutions maintained missionary bodies, number is certainwhose ly much more than that of the purely Indian non-missionary institutions, and whose funds are generally received from foreign countries, and making the necessary allowance for certain items which are put down against this head in the official returns merely to adjust the accounts, it would not be putting it too low if we say that not more than thirty lakhs were really spent from private non-missionary sources during the year 1906-This amount is undoubtedly a drop in the 1907. ocean when we consider the vast number of the population that is to be educated. The chief need with regard to education in India is that it should be

made gradually more and more suited to national temperament and requirements. In the special circumstances of India, where education is at present entirely under State control, there is bound to be a sort of dead uniformity and an unconscious imitation of foreign ready cut patterns. institutions aided by the State have necessarily to follow the same lines as are laid down for the State institutions. The only institutions from which something can be expected in this direction are those which receive no assistance from the State. In order to ascertain what sort of education, and what lines is best suited to the national temperament and would bring out all that is best in the nation, it is necessary to carry on different experiments on different lines.

Taking into consideration all the facts mentioned above, it is absolutely necessary that more and more unaided schools and colleges, as well as Universities, independent of State control, should be established, and that they should receive every encouragement from official and non-official quarters.

Further, as long as the policy of the State remains as it is, the only institutions that can give cheap education are the unaided private institutions; but they cannot maintain their efficiency unless they have an ample supply of funds from the community. But it is a matter of the profoundest regret and almost a national calamity, that private effort in the matter of education is not at present equal to the occasion, as is evident from the fact that in almost all the different stages the number of unaided institutions is fast decreasing:

A Annual Company of the Annual Company of th	Arts Colleges	Secondary Schools	Middle Vernacular Schools	Primary Schools
1902	53	822	129	17,597
1907	42	760	82	14,288

This unfortunate decrease in numbers not only means so much loss of education, but there is also loss in the organising capacity and power of initiative in the people.

There are, I admit, many difficulties in the way of the establishment of institutions independent of State assistance and control. One of the difficulties is that there is unfortunately too much suspicion in certain quarters, and it is always presumed, and very often with a regrettable want of fairness, that the object with which such institutions are started is merely that of competition. It is always forgotten that, under modern conditions, in no country in the world can there be any effective competition between the State and private effort in matters of education. The chief function of private effort is to supplement, and not to compete with, the efforts of the State. The sooner this fact is clearly recognised the better will it be for the interests of India.

It will thus be seen that the obstacles in the way of independent private effort are many. But they are not insurmountable, provided the national consciousness is fully awakened to the needs of the moment and the people show that they are in earnest about it. What is wanted is that men of brains, men of money, and men of energy, should all contribute their share to the uplifting of the nation by means of education, which can be sound only

when it takes into account the national needs and the national temperament. Hughes, in his valuable book, *The Making of Citizens*, while reviewing the systems of education prevalent in the different leading countries of the West, says:

"In comparing the training of citizens, therefore, these national idiosyncrasies will need to be very carefully estimated. For example, any system of training which would tend to crush national aptitudes and characteristics must be condemned; whereas any system, crude though it be, which tends to develop these must receive commendation. Each nation has, it is believed, the system best suited to its idiosyncrasies. It is by development along its own lines that each system will reach the ideal, not by adaptation of other systems. Evolution, not revolution, is the order of development."

To take a concrete example: merely secular education is not suited to the national genius of the Asiatics, and much less of the Indians. But in the peculiar circumstances of India the State rightly abstains from imparting religious instruction and maintains a policy of religious neutrality. It is all the more necessary for the people to open private institutions in which religious education can be given, in order to supplement the efforts of Government. This is already being done successfully in France and America, where the system of State education is secular. There is no reason why an equal measure of success be not attained in India in this direction. It is now fortunately recognised that a withdrawal of religion from the school-room has an unwholesome effect upon the tone of the school, and that it is

a mistake to suppose that religion is a matter only for home instruction and should have nothing to do with the school. Religion is not like a garment which can be put on at certain times and on certain occasions. Children are often very much logical than men, and when they find that the very idea of religion is to be banished from the school, they begin to think why it should not be eliminated from the home. But in imparting religious instruction, it is necessary to bear in mind that children should receive religious instruction in their own faith. Such institutions are at present very few, and it is highly desirable that their number should increase. We should, however, guard against the creation of any spirit of narrowness or sectarianism. Toleration and broad-mindedness should be the guiding principles.

In India to-day we find the followers of all the religions of the world living side by side, perhaps in future to fulfil some higher purpose; and amidst the critical times that India is certain to pass through, the Theosophists will find their true work. It will be their duty not only to establish schools and colleges, and to put their brains, their wealth and their energy into the service, but also to provide for the religious education of every child in the faith into which he was born. Their duty, however, will not be over when they have achieved this much; they will have not only to revivify and resuscitate all these great and noble religions, but will also at the same time have to work hard to bring in peace, mutual respect and good-will among the different religions. A Theosophist will have to deal with half a dozen patients

now lying in one place in a hospital, but who were in their days of health strong, mighty and brave—the patients now suffering from chronic ailments due to ignorance, and having on their bodies the bruises and the marks of blows received from each other in moments of intense passion and anger. A Theosophist's work will be that of a doctor and a minister, and his aim should be to see that, when the patients recover, they will be free from all taints and will forget the old feuds, and recognise each other once again as brothers—children of the same parents. For the Theosophists in India, truly, a work of great responsibility, but a work in which it is the highest privilege of every individual to take some part.

SOME HINTS ON FEMALE EDUCATION

BY

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As one connected with the Shri Minākshi Vidyā Shāla, a girls' school conducted at Madura under the auspices of the Madura Theosophical Lodge, I have experienced difficulties which perhaps have also been felt by others interested in female education in this country. I mention a few of them hereunder, with a view to a practical solution by persons more experienced than myself.

1. The first and foremost difficulty which every Manager of a girls' school in the Madras Presidency feels (I believe it is so in other provinces also), is the want of properly qualified women-teachers. This difficulty is the chief, if not the sole, cause of the unsatisfactory progress of female education in this country. On account of paucity of capable women-teachers, we are forced to employ menteachers; in consequence of this, our girls do not remain in school beyond the age of 10 or 11, which is just the age when their intellect opens and begins to expand, and welcomes intelligent guidance. Real education cannot be imparted below that age. It is said by a scientist that only after the age of 12 a hoy or girl can begin to understand facts, and before that age can get by heart mere words.

It is no doubt true that Christian missionaries are turning out women-teachers; but for obvious reasons they cannot be employed in Hindū girls'

schools. The women-teachers turned out by the Government Normal Schools are also most of them Native Christians. We want high caste Hindu women, trained and well read in Hindu religious books, and capable of guiding Hindu children on the Hindu national lines. They must be imbued with the Hindū ideals of Sāvitrī, Sītā, Damayantī, etc.—and at the same time should be well disciplined in the western methods. It is only when our girls come under such teachers, that we can hope for true education of them, in order that they may become true Aryan women worthy of the race. This is not, however, a lofty ideal pitched too high for practical realisation. The Hindus should really feel and appreciate that education is the true basis of the advancement and culture of Hindu women, and that cultured Hindū ladies are at the base of our national regeneration; then we can find the sinews of war for an institute for training Hindu women-teachers on the national lines. As to materials, we have plenty, in the shape of the girl-widows of the high castes throughout the country. The true and effective solution of the difficulty we feel in this matter is to utilise the large number of widows by training. them as women-teachers, and thereby to enable them to lead an honorable life of usefulness both to themselves and to the country.

I have not seen, but have heard, a good deal of the training institute conducted at Poona. We should establish an institute of that sort in every province. Till then, our endeavors on behalf of female education cannot be considered satisfactory and real.

Such an institution, if established, can expand its usefulness in so many directions; such as training midwives, women-preachers and expounders of our religious books to our zenāna ladies—similar to the Bible-women employed by missionaries ostensibly for education but really for conversion.

The second difficulty we feel is the absence of suitable text books. This complaint holds good in regard to text books both for boys and girls. There is not a single book put into the hands of our boys or girls which tells them of the greatness of the Rshis, their forefathers, and which in short is calculated to nourish patriotic sentiments, or to inspire them with love and reverence for the past of India, and for the country of their birth. It is a woeful and melancholy want. The Central Hindu College has now done something to minimise this complaint by the recent publication of The Children of the Motherland and Stories for Young Children. More books must be published on this line. It is a common-place that the text books now used for girls are not suitable for them. Proper and suitable readers should be framed and written for our girls. As regards religious text books, up till recently we had great difficulty; and the Central Hindu College has done a great service to the country by the publication of the Sanatana Dharma text books. In this connexion, I may be permitted to say that, between the simple Catechism and the Elementary Text Book, there is a long and wide gap. We require an easier text book on religion, intermediate between the catechism and the elementary text book. Teachers feel great difficulty in taking boys

and girls from the catechism to the elementary text book. We are using now as such intermediate books—the Arya Maṭa Catechism, the Rāmāyaṇa and Mahābhāraṭa Catechisme—all written in simple and easy Ṭamil. Nevertheless a text book intermediate will be a welcome addition to our religious curriculum.

3. As the generality of our girls are drawn from poor and middle classes, as far as this world's possessions go, though they be Brāhmaņas and of other high castes, it will be an inducement and a real boon to our people, if girls be taught or two industries suitable for home-life, that they may, by exercise of such industry in after-life, add to the income of their husbands, or earn an honorable livelihood if unfortunately thrown upon their resources by loss of their bread-winners. In this connexion, I may mention the case of a Vaishņava Brāhmaņi lady, who adds to the income of her husband by singing songs on festive and ceremonial occasions in Brahmana households in my In Southern India, at any rate, music holds a prominent place in the performance of most Samskaras; Mangalam songs and songs of blessings are invariable accompaniments. That is the reason why in all girls' schools in South India, music is separately taught.

Dr. Nanjunda Rao of Mylapur has been working in the direction of the introduction of home industries. I mention hereunder a tentative list of some industries which may, with advantage, be introduced in our schools:

- 1. Knitting of socks.
- 2. Introduction of sewing machines.
- 3. Woollen caps.
- 4. Small banions.
- 5. Knitting bodices.
- 6. Making coats for children.
- 7. Tape-making.
- 8. Palm-leaf weaving.
- 9. Fan-making-with paper, palm-leaf, etc.
- 10. Drawing pictures of Devas and Devis.
- 11. Clay modelling—especially Ganesha, Sarasvați, Shri Kṛṣhṇa—for the respective festivals.
- 12. Rattan work.
- 13. Bookbinding.
- 14. Lace embroidery, etc.

At present, poor Brāhmaṇa-widows, when thrown upon their resources by loss of their husbands, have to pound Aval (unhusked rice steeped in water and then dried and bruised) to earn their living. Their other sources of income are: sweetmeat-making, appalammaking and preparing pickles and preserves. Owing to the keen competition and struggle for existence which is being experienced by our people, by men turning to these occupations, women are not able to earn a decent income by them. The introduction of the other industries above-mentioned may go a great way towards bettering their condition.

4. Before I conclude this short paper, I may suggest that educated people should avail themselves of the numerous opportunities afforded by large assemblies of relations and friends, by reason of

festivals and ceremonials, to explain and expound religious philosophy and science. On such occasions, a judicious use of a magic lantern, with a good equipment of select slides, will be greatly appreciated by our elderly ladies.

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EDUCATION IN THE LIGHT OF THEOSOPHY

 $\mathbf{E}\mathbf{Y}$

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EDUCATION is such an important subject in the evolution of humanity that it certainly holds a necessary part in any Theosophical deliberations, and the education of one half of the human race is of paramount importance not only to the half to be educated, but also to the other.

Humanity must be looked on as a whole, not in detachments or parts; and those who are seeking for a better understanding of the laws governing human evolution must remember that there can be no rivalry between man and woman, for they stand or fall together. There can be no real advance on the one side without a corresponding advance on the other; for women are not placed in this world merely to mark time, or to be the mere spectators of the evolution of man. Each sex has an appropriate function to fulfil, and each sex should receive the appropriate education for the performance of that function.

For most nations of the world the time is past when women were looked upon as soulless

creatures only created for the use and benefit of man; and it may even be said that in some countries the pendulum has swung in an opposite direction, and there has come to women the temptation not only to develop those capacities which would enable them to fulfil their own functions, but in some instances to usurp the functions of the opposite sex.

So many causes have led to this condition of affairs that no blame can be attached to those who have thus lost sight of their own particular duties to take up those of others; but it remains for Theosophy to point out where mistakes have occurred, and, by the knowledge obtained from the wider outlook on life which Theosophy gives, to teach the true position of women and the part they have to play in the evolution of the race.

What then does Theosophy teach with respect to the human ego, and is there any essential difference in the Spirit that dwells in a male or female body? Clearly not, for we are distinctly told that the ego has to come sometimes as a woman and sometimes as a man; that for the average person these incarnations are fairly regular and as many in one sex as in the other. I have said that this holds good for the 'average person; because as the ego nears the goal of human evolution there is the tendency that the higher Initiations should be taken in a male body. There are, however, so many exceptions even to this that it is difficult to lay down any arbitrary rule.

Let us then consider what are the fundamental differences in the functions of life which essentially characterise the man and the woman. In the first instance clearly to the woman belongs the great function of becoming the mother of the future generation. There have been times in the long history of the world when this holy function has been appreciated at its true value; in the past history of India this was so, and even now in India mother-hood is still held in the greatest veneration. But, alas for the sins and passions of mankind, that is not always so in all countries, and that which should be the holiest act of a woman's life has come to be regarded in many cases as a distressing consequence, to be avoided if possible, and is rarely considered as nature's true sanction to marriage.

The principal function then, of the woman, is to be the Mother, but that involves so much that all that is required for the education of women is contained in the one word Mother. Some may perhaps think that therefore all that has to be done for a woman is to make her fit to bring up the little creatures whom she brings into the world, and that that is all that has to be considered in the education of women. To a great extent such an education would certainly give us types of women far superior to the majority that we meet with in the present day; but this is not all that is required that is connotated in the word Mother; and indeed when we find an ego so fully developed as to combine in one both motherhood and fatherhood, then may we say that the perfection of humanity has been acquired. Patience that is strong, protecting love with the knowledge to guide, quick intuition and strength of will to carry out, tenderness and sympathy combined with justice and power; these are the qualities that we find in the Masters of Wisdom, in the divine Leaders of the race; and these are qualities that have to be acquired slowly and painfully in the alternate lives of man and woman.

In the early races of mankind the relative positions of the man and the woman were very clearly defined: the man as the stronger had to hunt, to fight; while to the woman belonged the cares of the household, the cooking and in many instances the production and cultivation of the crops that formed their principal food. In this condition of life the man developed entirely the qualities of strength and courage, the woman devotion and patience. Through many many incarnations, first in one sex then in the other, the ego gradually acquired the foundation upon which character could be built. With the unfoldment of the mental body the development of the character became much more complicated, emotion had to be welded with intellect, and education may be said to have begun. Nature, that is to say the Divine Will in manifestation, at ' first works without any co-operation on the part of the ego; yet this condition is somewhat beyond the state of the savage, inasmuch as the mental factor is brought to bear upon the life, but the pressure is from without and not from within. Difficulties in obtaining the necessaries of life developed more exact adjustment of means to the end, and gradually the lives both of men and women became more an educational school for direct inculcation of the qualities necessary for perfect development.

Life after life proceeds in this way, each race

giving its particular training in the characteristics of its unfolding, till at last we find ourselves in this fifth sub-race of the fourth Round, and face to face with the great economic problems of the relation of the sexes in the labor market, in education, and in political life. Woman, and man for woman, has of late put forward many claims, and among them the great claim of an equal right with men for education. The education of women may be said to be one of the particular features of the present age, and we find in most of the modern civilisations High Schools for women, Colleges for women, and every facility afforded them for intellectual development.

In fact much of the modern development in the education of women seems to be to give them exactly the same training as their brothers both physically and mentally, so that we have women in the cricket and football field as well as in the sphere of university honors and scientific achievment. We have seen that in the vast scheme of evolution as planned by the great Lord who reflects His will in manifestation, both man and woman have to be regarded as the double facet of the image that is being moulded. There is therefore no question, and can be no question, as to the right, I would rather say the duty, that women should have the opportunity of development of their capacities as well as men. But all things are not at all times convenient, and the fact that the divine Will has given two ways through which the ego has to develop shows that there must be characteristics peculiar to each.

It is for Theosophy to take up this great question of the education best fitted for women, and to show in this, as well as in all other subjects, that the knowledge which is obtained in the study of the divine plan of evolution will enable us to co-operate in that plan, so as to aid instead of hindering the development of the race.

One very important point to be remembered by educationalists from the Theosophic standpoint is that there are younger and elder among the egos to be trained, and that therefore it is not possible to lay down fixed rules of education for either of the sexes; that which is for the grown man is not fit for the babe, and as a rule the ego has far more knowledge of the requirements necessary for his own growth than the outsider educating. It needs the intuition which comes from experience, from the ripening of the faculties of the soul on the higher planes, to judge correctly as to the right training for each individual ego. That is why in the ancient days the teacher was also the priest; and that is why in these modern days with the modern pressure of examinations and universiity degrees, in which the function of priest is neglected and an examiner takes his place, it is the father who should take the position of the guide and guru in the highest sense of the word. My subject however has a limited area and concerns itself with the education of but one half of the human race, but the great principles of education are the same, whether for man or woman, and it is but the details that have to be modified. Let us therefore see first what should be, from the

Theosophic standpoint, the education given to the baby egos, to the masses of the people, to the toiling millions that seem to pass life after life with so little advancement towards the great goal. There is a fundamental principle of growth which has been too much neglected of late years and that is, that in order to grow there must be something to which to aspire. We are told in Light on the Path that we should "grow as the flower grows;" and what is true of the highest spiritual life is also true of the lower; as is above so is below.

Would the flower grow in the dark, if there were no rays of God's sunlight for it to reach out to? Plant your little seed in a dark cellar where there is one chink of light, and the tiny plant will find that chink and grow towards it. This should therefore be the first lesson put before the child. Cast your books and slates away; let reading, writing and arithmetic follow to strengthen and solidify: but start your education of the young with an ideal; let something higher be aimed at than marks or prizes, promotions and class advancement. It is the rule to a great extent in many countries to exclude religion from the curriculum of schools, and so long as sects are at war with one another there are difficulties in religious education which hitherto have proved almost insurmountable. But for Theosophy, which claims that all religions are at root one, the particular branchlet is of but little importance provided that the seed is planted.

It is this seed of aspiration which should be given to all alike, to the child of the rich, to the child of the poor, to the baby ego, and should also

be revivified in the ego that is passing on to higher development. Particularly is it necessary for the baby egos that are everywhere in our midst, the young souls that are just beginning to tread the upward path from the unconscious to the conscious. The real teacher will try, by precept and still more by example, to draw upwards the potential divine faculties that lie latent in every individual.

Stories of the great and good should be told to the little child; strong manhood and loving womanhood should be put before the boy and girl; and here let me say that it is not by reading but by talking that the lesson should be given. The life of the teacher must pour out upon the child, with gentle voice, with loving eyes, with tender smiles, the lesson must be given; and who does not know, that has any experience in teaching children, how quickly the response is given, little restless bodies become quiet, eager faces look up, and the beautiful story of saint or sage, of heroism in life's trials, of submission to injury, of love to God, breathed through some beautiful verse, has awakened the baby ego to an aspiration towards the divine life. Boy and girl alike need this training, . and I believe myself that it is good at an early age to have the two sexes associated for instruction. Boy and girl come together in the home, together they hang round the mother, together they clasp the hand of the father and together they should learn the first lessons in school. Separation comes soon enough in life without it being needlessly introduced into the early stages of school life. Each will imbibe something of the qualities of the other;

the boy will become more gentle and the girl more self-reliant; each can be taught to respect other, and this will give a better foundation appreciation and understanding of each other in the future. Then the time will come for the boy to be taught a trade or manual work of some kind. In this country in the village schools, agricultural pursuits will soon draw the boy from school life, while the early marriage system has the same effect for the girl. Therefore it would be well that the last two years of school life of boy and girl should be passed separately in the acquirement of different lines of knowledge. The boy should be taught the necessity of developing a sound healthy body, that mind and body should be pure and chaste, temperance in food, and the dignity of labor. His hands should be made useful and every facility given him to acquire skill in his life's work. girl all questions connected with household management should form the subjects of study, the care of children, nursing the sick, the cooking of food, and elementary physiology of the human body. All this should be taught in the light of the ideals which have been constantly inculcated from the beginning of school life. The ideals of unity, and the unfoldment of powers in the aim of service, this should be the ideal for both boy and girl: service to the Great Being whose Fatherhood is acknowledged, service to the brother who stands by our side.

This simple education would make our boys and girls better fathers, better mothers, better citizens in town and village. Then we come to the great question of the education of the girls of the more cultured classes. All that has been said about the early years of school life will equally apply here. Co-education seems as advisable as in the humbler ranks of life; but in India there are many reasons which make this system more difficult, and the customs of purda and early marriage enforce a separation of the sexes at an early period of life. Education therefore has to be carried on in separate girls' schools from a comparatively early period, and it is in these schools that so much might be done to help forward the evolution of the individual and the race from the Theosophic standpoint.

We have said that the ego comes alternately into the male and female body, generally, we have been told: a certain number of incarnations in the one and a certain number in the other. What are lessons that are more particularly gained the in the female body? It is mostly a weaker body, it has not the strength of the male, it is in many dependent for everything on the male. cases Here we get two great lessons that have to be learned—obedience and submission. It matters little that obedience is often enforced from the low standard of physical force; it matters little that submission is often a matter merely of local custom without reason and without justice; the lesson is at last learned and the indwelling ego will again be able to take up the stronger body; but with that strength the germs of patience and tenderness will have become incorporated, so that love will be the weapon with which he will rule, and tenderness

and compassion for weakness will render him the fit leader in home and society. In girls' schools therefore the lessons of preparation for the unfolding of character must be inculcated. As the girl has the rôle before her of motherhood, all the qualifications required for that holy function should be put before her. The duty to the physical body, the necessity for the development of character, self-control, and aspiration to become the fitting mother for the future child. I know it is often said that the young girl should not know, should not realise anything as to her ultimate destiny in life, and marriage and motherhood are forbidden subjects in the school curriculum.

The more ignorant the young girl is, the more innocent is she supposed to be. But ignorance is not innocence; and that the young girl should learn about the most vital interests of her life from the casual talk of careless servants, or from those but little more advanced than herself seems to me the surest way to tarnish that innocence that should be her guard and ornament. Therefore I would have lessons for the growing girl, lessons on motherhood; let her realise how the tiny seed grows into the beautiful flower, how the little bird develops from the egg, and that in the future she also will have the great part to play of unfolding a new life and carrying on the great work of the creative power. Surely such a preparation for motherhood would be of the greatest value to the young girl who is about to fulfil the supreme function of motherhood! It is as a religious ideal that these lessons should be given, as something holy and sacred, and they should be given by the person most venerated and most loved by the child; well will it be for our Indian, as well as other homes in all countries, when fathers and mothers give such instruction to their boys and girls as shall guard them from the dangers of the world, and help them to realise the sacredness of fatherhood and motherhood.

Those girls who are able to pass some years at school can have much imparted to them that will be both useful and, at the same time, serve to bring out the qualities and faculties that lie latent in their nature; and here it is necessary for the true educationalist to guard against the error of supposing that all are to be taught the same things, all to be led on the same road. Just as a wise parent studies the tendencies and proclivities of a boy before he starts him on a professional career, so should the teacher study the character of the girls committed to her charge. At one time in the West it used to be considered the proper thing for a girl to learn to play on the piano, whether she had any musical capacity or not. The consequence was that both teacher and pupil were doomed to daily hours of irritating struggle to achieve the impossible, for musicians have to be born and not made; and not only that, but the result was painful and good time was wasted. Let the girl to whom music or drawing is a delight pursue those studies; let the sister whose eager brain delights in number and science equally be allowed to study on those lines; do not call one a feminine, pursuit and the other a masculine, for the entity who has acquired the capacity for music, art, or science should be taught to apply that

capacity to the requirement of the karmic life in which he is placed. Science, art, and music should therefore have their place in girls' schools; unless opportunity is given for development the eager desire for knowledge is checked and discontent takes its place, as has so often been the case in women's lives. The majority of girls, however, will not show any particularly marked characteristics; for such there should be as much science as will teach them to understand and admire the world that surrounds them, the wonders of the stars, the history of nations and other countries of the world. beautiful adaptation of means to ends in vegetable and animal life, the effect of drugs, the analysis of food-stuffs, and the part chemical they play in the nourishment of the body. There should be art that will help to make the home beautiful, good needle-work, well-cut garments, and the training of the voice to sing simple songs and bhajans. This should be the education of the girls, the future mothers of the race, and with such a training they in their turn will be able to lead their children, boys and girls, in the first steps on the road to knowledge.

And for many in East and West whose karma has taken from them the joy of a happy home and loving children, instead of a useless and possibly a loveless life, there will be a chance for them to take their gifts to many motherless little ones, and to become teacher and friend to many.

THE EDUCATION OF EMOTION FROM THE STANDPOINT OF THEOSOPHY

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As the years roll by, it is becoming increasingly felt that the Theosophical Society is taking the lead in all the great movements of the world that have any connexion with the welfare of the human race. What the work of the Society has been in the past has been put forward by revered President, in a lecture which those who had the privilege of listening to it can scarcely ever forget. She has there told us how, when the Society first began its work, India lay dormant and unable to shake herself free from the lethargy of ages. That India had anything of value to contribute to the civilisation of the race, that she had any message to deliver to the world, was looked upon as the dream of a mad-man. The very children of the soil gave up the Motherland as dead, and thought of the glorious past in the same manner as they thought of the extinct civilisations of Egypt and Chaldea. It was devoutly believed that the only hope for India lay in a quick and immediate repudiation of the past, in once more building the foundations of a new national life on the basis of the political and social philosophy of the West. The first part of

the work of the Society consisted in fighting against this most fatal error, in struggling against the despair of India's children. None can deny how victoriously the Society has come out of the struggle. That India has awakened to a sense of national self-respect, is at last recognising the greatness and splendor of her past, is abundantly clear from the manifestations of new life and vigour that are so prominent in the country to-day.

That part of the work of the Society has come to a close. The time has come for it vigorously to take the lead in all the forward movements of the day, to dictate the principles that should underlie all earnest human endeavor. Specially is it the function of the Society to guide and inspire all movements in the direction of education, and we have accordingly met here to discuss the many and varied problems of education in the light of those great truths which we have all of us had the privilege of receiving as members of the Society.

I would like at the outset to point out to you some of the difficulties which confront all who are engaged in the task of educating the young. Few people realise the enormous responsibilities of those to whose hands is entrusted the task of moulding and shaping the lives of hundreds of young men. Very few indeed understand the nature of the qualifications that are required for purposes of teaching. The profession of teaching has become degraded in India as well as in other parts of the world, owing to one well marked and

noticeable feature which is the characteristic of the present day. It is the lack of reality, the obedience to the letter and ignoring the Spirit, the insistence on the correctness of the outer form and an almost entire disregard of the inner life. In fact, it is the materialism of the day, not only the philosophic materialism of the atheist and the agnostic, but the practical and more dangerous materialism of orthodoxy, which pretends belief in outer forms from which all reality has gone.

We can observe the silent but powerful effects of this practical unbelief in the spiritual, in all the activities of the day and especially in the field of education. In fact, taking the educational institutions of the day, it is difficult for a student to pass through the University course without having his finer and more delicate feelings and emotions more or less starved and stunted, if not crushed.

To speak frankly, the fundamental defect of most of the present day schools and colleges is the lack of inspiration, the lack of ideals. Education is not a living thing; it does not inspire young men to noble and sustained effort, it does not lead them to realise the infinite possibilities of life. That education has anything to do with the development of character is an idea in which most young men of the present day practically disbelieve. The only ideal placed before the student is the hope of winning distinctions in the University examinations, and the prospect of a comfortable place in the Government Service. It is sometimes painful to see before our eyes all the energy,

the enthusiasm, of the young wasted for such an ignoble purpose. It is painful to see the weary, despairing looks of the young men who find that all their efforts to get a degree are in vain. Perhaps I may be doing injustice to the present system of education. But one cannot help feeling that the spirit of the whole thing is false and unreal. And the sooner it is replaced by something much more living, the quicker will be our progress.

Looking at the system of education to-day, one feels that one aspect of education is entirely ignored—the development of the emotional side of life. Everything is made subordinate to the development of the intellect. Provided a student can get through his examinations, little regard is paid to his feelings and emotions.

I am not a student of Psychology and I do not propose therefore to enter into an elaborate scheme for the development of emotions. My only title to speak to-day is that I have, to a certain extent, drawn the strength and inspiration for the work that I am doing from an institution to which many of us owe all that we have which is of any value. I do hope that I may convey to you, feeble as my words are, some of that inspiration and life which we are continually receiving.

Our revered President told us how, when she was on a visit to Allahabad, the Director of Public Instruction remarked that the C. H. C. was building a new type of young man, well-marked and definitely bearing with him the hall-mark of the institution. Now that is a perfectly true remark. We are aspiring in the C. H. C. to

subordinate everything else to the one great ideal which we have before us, namely, to send out into the world, young men frank and outspoken, courteous and honorable, loyal, reverent to the mighty traditions of the past, devoted to the Motherland and the Empire.

There is one thing which outsiders do not quite realise and that is that we, who are engaged in the work of the College, are going through a much harder discipline than we impose on the students. We realise that besides the task of imparting intellectual instruction in the subjects which form part of the University course, we have the much more serious task of moulding the characters of the young men who are placed in our charge.

In connexion with the latter part of the work, it is necessary to remember that the lives that we lead are much more important than the knowledge that we may possess. Speaking casually to a number of students. I asked them to let me know what it was that professors and teachers had to guard against in their relations with the students, what attitude was most helpful to them. One of them said to me, with a frankness and insight that delighted me: "Remember, sir, that by a single harsh and unkind word you may lose the power to help." I value that suggestion as a message to all who have anything to do with young men or children. It is necessary to remember that every time we are in the presence of these young and innocent boys we are judged and watched. Every word that we speak, every thought that we think, rouses the corresponding quality in the student. We who are

members of the Society realise, or at least ought to realise, the power and influence of thought. We are continually sending into the outer world thoughts good, bad and indifferent, and everybody that comes within the pale of their influence is correspondingly affected. A thought of love, of devotion, rouses and vivifies, in those around us, a similar quality. If only one could realise in its fulness what this means, it would be possible to understand the enormous responsibilities of the teacher. It means that the teacher is continually affecting the lives of those around him; and, if he realises his duties to his students, his life will be one of strenuous and continuous discipline. No matter what difficulties he might have at home, the teacher will have to remember that part of his work in the college is definitely to be a centre of the purest and happiest feelings and emotions. It is a matter of common experience that sometimes an audience of students is apt to be dull and not sufficiently responsive; the lecture fails to attract in spite of the best efforts of the lecturer. Generally speaking, this may be traced to some depression or some unpleasant mood the lecturer. It is important to remember that more important than the actual spoken word is the life that is poured out in the words. However brilliant a lecture may be, it will fail to educate the students unless the lecturer pours himself out in the speech. It is in this inner education of the feelings and emotions, that is continually going on all the time that the student is under the influence of his teacher, it is in this silent but definite influence of the teacher's life, his ideals, his

temperament and personality, that lies the most important part of the training which is received by the pupil.

We who are Theosophists recognise this definitely. An attempt, therefore, must be made by those members of the Society who are engaged in educational work to recognise the possibility of consciously working upon the feelings and emotions of the students. One of the greatest benefits that Theosophical teachings have conferred upon us, is that we obtain very clear and precise knowledge on this point.

I shall try now to give you a few ideas on this method of developing the emotional side of students, suggested by the teachings of Theosophy. It must be clearly realised by the student of Theosophy that every institution exists as a definite entity on the higher planes, that the life of that entity is made up of the thoughts that generated and the lives that are led by the members of that institution. We often talk of an institution as an organism. But to most of us it is only a phrase, convenient as an analogy for the purpose of conveying an idea. But that an institution has a life of its own, an ever-changing life, that is colored by the hopes and aspirations of the units that compose it—this is a fact little thought of, little realised. This is an extremely important thing to remember; for on its realisation depends largely the possibility of regulating and controlling an institution on the right lines. Let us clearly understand then that a college is a definite entity, a centre from which are perpetually

radiating out those life-currents which have a wel marked influence on the character of those who communder its influence. Every one who takes part in the working of that institution is a part of that organism. His devotion to the institution means as added power to the institution. The phrase 'giving one's life up to the college' is no idle meta phor. It means definitely that the person has be come an actual channel through which his own life is poured out into the central reservoir from which the whole institution is deriving its life-giving currents.

We realise that well in the C. H. C.; we know that all our hopes and aspirations, that all our devotion to it, must tell in the long run. We under stand the power of organised thought and action Every stone of the edifice has been reared by the loving devotion and sacrifice of those who have worked for the institution. Surely then, the spirit of the C. H. C. must eventually mould definitely the lives of those students who come to it. Ir fact it has already done so. We are creating a new type of Indian manhood, and as the note of the college is devotion and sacrifice, so every student that passes through our hands bears on his brow the stamp of devotion and sacrifice imprinted lightly or permanently by the Mother that gave him his spiritual life.

To live in an institution with definite spiritual ideals that inspire it, is perhaps the strongest element in the development of the emotions of student. Before a student can become part of the college he must understand the ideals of the college,

he must put himself in touch with the pulsing life of the college. For he has to live continuously in an atmosphere produced by the spirit of the place. The college can only help him if he is receptive to its influence; if he does not, by his unsympathetic attitude, create walls of separation which isolate him from the wider life of the institution. We can easily distinguish the student who draws the life from the institution from the student who does not. The latter is discontented, feels himself out of place. out of touch with the life of the college. The person on the other hand, who lays himself open the influences of the college, throws himself whole-heartedly into all its activities. Suppose anything has to be done, he does not wait to be asked. Silently, unobtrusively he takes his chance of doing something to help. He feels that the college belongs to him as much as to those who carry on its work. A striking instance is before me. Recently at the time of the Vicerov's visit to the college, elaborate preparations had been made in the way of decoration, and a huge shamiana had been erected to receive their Excellencies. A number of professors and students had kept watch during the night. Then came a big downpour of rain which undid the loving labor of many hours. Early in the morning, without a single order, more than a hundred students gathered together to put things right, and they worked in the heavy rain for two hours, drenched to the skin. A spirit like this among students is an encouraging sign to us that the college is doing the work that we wish it to do.

As the college is the most important influence on the life and character of a young man, on the attitude towards life which he will adopt, a few thoughts on the methods of building up what I have called the spirit of the institution may not be out of place. The first necessity of any institution whose function is to inspire is that it should have some definite ideals before it. It is not enough to strive vaguely after the conventional 'amelioration of Indian students, or some equally vague idea. It must be some soul-moving idea, capable of stirring men's minds, some noble and inspiring ideal which has the power of rousing the higher and subtler emotions of the young men. The students must feel that when they enter the college, they enter an ashrama, where they are going not only to gain the knowledge that will help them in the world, but where they will comthat purification and discipline of their thoughts and emotions which will enable them to go through the severer discipline of life with courage and dignity. A college that does not inspire in. the students an instinctive feeling of reverence for the spirit of the place, can never hope to educate the youth of the country. In fact, what India needs most at present is a little of the spirit of ancient ashramas, some breath of the old life to vitalise the present imperfect system of education.

Young men are attracted by ideals. They like to feel the grandeur and power of a great thought. They are longing for some touch of the higher to inspire them in the discipline and drudgery of daily life, a little of the power of a high emotion to uplift and give them the motive power

to pursue the common occupations of life. Let us take an instance from a very ordinary discipline of college life-drill. It is not a particularly inspiring thing to march at the word of command, to walk in step with others, merely for sake of the physical benefits that one may derive from it. But ask the student to remember that by drilling himself he is gaining promptness, alertness, the power to co-operate with others, the power to control the personality for the sake of whole, that he is preparing himself for a higher life in which the aspirant has to be continually alert, continually watchful for the whisper of that inner voice, the voice of his Guru; ask the student to remember that spiritual life needs this drilling, this power of instant and unhesitating obedience to the slightest wish of the Teacher. I am sure, that where students are asked to look upon the daily events of life in this spirit they will do things with willingness and enthusiasm. In this connexion, I cannot refrain from quoting an instance which is mentioned in the February issue of the C. H. C. Magazine. A very small student, who was to take part in one of the drill exhibitions on January 20th was down with fever on the 19th. A sympathising friend expressed the opinion that he would not be well enough to do his duty on the 20th. The little fellow stoutly protested that the 20th should find him at his post. "If I do not serve my college, how shall I serve my country?" said If that spirit spread, writes Mrs. Besant, all will be well with the Motherland.

To that small boy, drill meant something greater, something grander, than the mere physical exercise.

It meant to him a preparation for a life of service to the country, a life in which duty overrides all personal inconvenience or discomfort.

It is this change of attitude towards things. that a college with ideals can bring about. Nothing has a greater power to fire a young man's higher emotions than to feel that he is surrounded by noble and inspiring influences; and when he goes out of the college into the wider but less inspiring life of the world, he will carry with him some of that inspiration, he will carry with him ties of affection and friendship, memories of a life lived in great and noble traditions which he will not willingly let die. I hope I have necessity of made clearthe having great and inspiring ideal behind the college. That can only be done if the work of the college is carried on by a religious body consisting of persons who have given up all worldly ambitions for the sake of an ideal. The function of the teacher is to inspire and guide; and no. teacher is worthy of the name, unless he strives to be some faint, feeble reflexion of the Supreme Teacher. In fact, unless we attempt to build up our educational institutions on the same eternal principles which are the basis of the great teaching department of the world, unless the work of the teacher is inspired by love and compassion and guided by wisdom, unless the teacher combines in himself the function of the priest and the instructor, no real education is possible.

The plea for religious education has been so often put forward that it might appear almost

stale and wearisome to insist upon it once more. Yet I wonder, how many institutions there are where the training of the religious emotions is looked upon as part of the daily work. tion in the doctrines of any particular faith is not religious education. Examination may be a help, but does not by itself constitute spiritual training. The question which we have to ask ourselves is whether the boys grow in reverence, in devotion, and in sympathy, whether they become more helpful and compassionate, and not whether their knowledge of the tenets of their own faith is accurate and complete. How many institutions are there which appreciate devotion reverence in their students as much as they value intellectual excellence? In order that education may be based on right ideals, the first change that is necessary is a change of attitude towards things. The modern tendency is to attach a great deal of importance to intellect and very little indeed to In this age of individualism and the emotions. competition, a very natural but none the less pernicious value has been attached to those qualities which pay most in the struggle for existence. It is the successful, clever, hard-headed man of business, the man with brains, that is honored by the world; and the unworldly, emotional man, the man whose heart beats with devotion and love, is scornfully classed as belonging to the sentimental and useless portion of humanity. In order that education may be complete, a new adjustment has to be made, and greater attention must be paid to the training of the emotions than has hitherto been the

case—especially at the present time when preparations are going on for the birth of a new race, marked by a quality which is more closely connected with the emotions than with the intellect, *i.e.*, Buddhi.

This adjustment is extremely difficult, because of the enormous pressure of the existing forces. It is not possible to ignore entirely the circumstances of the time; it is not possible to work out a well ordered system of education in which emotional training can be directly undertaken. But it is possible to lay greater stress on this aspect of education than has hitherto been done.

The changing times in which we are living are bringing into the world more and more egos of a well marked type. They are distinguished by a much finer and more delicate nervous system, which is liable to be shaken and thrown out of gear by all the disturbing elements of a bustling and hurrying civilisation. Now these changes are exceedingly suggestive. It shows, as students of Theosophy already know, that humanity is about to take a further step in the unfolding of the consciousness. The President has already described all these conditions of the modern transition period of the world's history in her well known book The Changing World.

The little glimpse of the future that has been given to us, of the nature of the vast changes that humanity is undergoing, is suggestive to us of the direction in which all our efforts towards the improvement of educational methods should move. We have been told that the characteristic of the

next sub-race is Buddhi. It is inevitable therefore that the most effective education should be one in which this particular quality is sought to be developed. Now Buddhi, or Pure Reason as it has sometimes been called, is the realisation of the divine unity that binds all things. In the lower planes it manifests itself as love, sympathy; and as every emotion springs from the two great forces, love and hate, or attraction and repulsion, it is possible for us to understand the importance that we should attach to the development of emotions.

Now no quality is more helpful towards the development of Buddhi, or in the guiding and development of the emotions, than the quality of devotion. It may be devotion to a person or an ideal; but whatever it may be, it is one of the strongest forces in the world. Through it one is able to break the shell of personality and realise unity. For in the fervor of devotion, the devotee forgets his smaller self and merges himself in the higher, knows himself as one with the Supreme Self. In these moments of ecstacy, a glimpse of the all-pervading Life is seen, and the devotee knows and realises that all separation, all differences, cease the moment the Supreme is seen. For a time the whole universe is seen as one mighty organism vitalised by a single life. It is realised that individual life is of no value except as forming part of the greater whole; that in the plan of the mighty Ruler who guides the destinies of nations and races, the progress of the individual is little thought of. The perfection of an organism depends upon the completeness with which the parts work out the plan of the organism. In Nature such perfect organisms exist. Every part of the world performs the tasks allotted to it with perfect obedience to the Will in the laws of Nature. So complete is this obedience that scientists are able to foretell with accuracy future events. Humanity, as it is at present, is not such a perfect organism. In fact the perfection of the individual was the ideal which the people of the last two centuries set before themselves. But the world is outgrowing that stage.

You have heard during the Convention lectures how all evolution is but a long process of change from the blind obedience to, or unconscious co-operation with, the Will of the Supreme. And the quality which at present is most essential, and has therefore to be most developed, is the power to co-operate in the divine plan, the power to sink the personal life in order that a greater and wider life may be ours. It is this quality that we should be trying now to develop, and as devotion is one of the easiest means of realising this ideal, we must lay special stress on this quality. The question then arises: How can this tremendous power of devotion be developed? Through recognition of and reverence for any one greater than ourselves. Where heart is reverent, and is willing to offer homage to greatness, there is the beginning of Bhakti. For the attitude of continual reverence is one which is most favorable to the growth of the higher qualities. It means that the ego has begun to see a glimpse of the Eternal.

I have no time to go into details of the way

in which it is possible to train these emotions in the students. All that I wish to emphasise here is the necessity of recognising their value. What happened ages ago is again happening to-day. If you go back into the history of the past, to the time when the nucleus for the future Āryan Race was selected out of the fifth sub-race of the fourth Root-Race, you see the principles which guided the Manu of that Race in the choice that He made. You know how people in whom there were the germs of Manas were selected to form the new type. It is easy to understand how these people must have been looked upon as queer, as dull, because they were below the normal as far as psychic development was concerned.

There is a similar danger now. The nucleus for the sixth Root-Race is being chosen. The type of man that will be selected will not be one which is noted for any extraordinary intellectual development. Men will be selected more for their sympathy, their power of co-operation, their spirit of brotherhood. There is a strong tendency to admire intellect alone, and to ignore other qualities. Now order that education may be conducted Theosophical principles, we have to change entirely the whole spirit of it. We have to recognise the plan of the future and co-operate with it. Every day we see egos being born who come into a world entirely unprepared to receive them and train them. In fact our schools and colleges are hardly fit to undertake the training of egos whose delicate feelings and emotions can hardly help receiving a rude shock from the rough and coarse

methods of to-day. More and more we want teachers who will treat the young physical bodies with a tender reverence—tender because of the weakness of the body-and with a reverence for the inner ego who is trying to mould his body and express himself through. The work of the teacher who realises his responsibility is, indeed, a very great one. We must study the young men around us, not forgetting that though the body may be young, yet the soul may not be so. We must look upon it as a privilege to train these bodies, to place them in an atmosphere which is as pure and as refined as we can make it, to stimulate and encourage all the higher emotions and starve out the lower. A great and mighty privilege, for in thus striving to do our work, we become conscious co-operators in the great work which the Supreme Teacher is doing. May we be worthy of that privilege.

HOW THE IDEALISM OF FICHTE HELPED TO CONQUER NAPOLEON IN 1813 AND 1814

MISS HEDWIG S. ALBARUS, B.A.

THE view of life which held sway in Europe, roughly speaking, from 1840 to 1880 was characterised by the belief that the destinies of nations were shaped exclusively by material forces, and found its typical expression in Bismark's famous saying that the German Empire in 1871 was consolidated by "blood and iron".

The end of the nineteenth century, however, saw a return to an idealistic philosophy which traces the causes of the events of the great world-drama to spiritual forces, to mighty currents of thought which dominate certain periods of history, and impress upon the leaders of the nations their indelible stamp.

Now this philosophy had grown out of 'transcendental idealism,' the view of life which the great thinker Fichte taught in the beginning of the nineteenth century; and there cannot be any doubt that it proved a most important factor in the regeneration of Prussia in 1813.

I shall try to show, in the course of this paper, how Fichte's teaching helped the people of Northern Germany, who were driven to the verge of annihilation by a series of disasters, to regain their national independence and to throw off the yoke of Napoleon.

Let us now briefly examine those wonderful doctrines of the great philosopher which proved to be stronger than the mightiest armies of the time.

The idealism of Fichte is really the logical conclusion of the philosophy of Kant, although the latter would have indignantly repudiated that idea. But Kant had distinctly taught in his Critique of Pure Reason that we are not living in a world of solid material objects, but that the houses and trees and people we see around us are in reality thoughts which the human intellect creates, in reacting on sensations caused by external stimuli by unifying material furnished by sensations.

But just as the Vedānta teaches that the visible Universe was produced by Brahmā assuming the veil of Māyā, or illusion, and that therefore the outer world could have no reality, so Kant also proclaims that our minds which create the objects around us being finite, our world is only a show-world, and that we could never know 'the things-in-themselves,' i.e., the noumenal factor behind the phenomenon. It is here that the idealistic philosophy commences.

"If I can never know the true nature of this world, but only the appearance of things," Fichte would argue, "then my mental states which represent those appearances, my thoughts and feelings, are the only reality to me; for what I can never know cannot be said to exist for me." So to Fichte the world is the Self.

But now the question arises: "If nothing exists except my subjective states of consciousness, how is it that we get an idea of an outer world?"

The answer is: "By activity." The ego, or Self, by realising itself in actions, is brought into contact with a Not-Self, i.e., the people and the things amongst which circumstances have placed us in this life and with which we enter into certain relations. Our deeper consciousness, the higher Self. determines those relations, creates our position in this life, and assigns to us the obligations which we have to fulfil. Therefore, to Fichte, the surroundings amongst which we live, the clothes we wear, the food we eat, the people who are with us, the things that make up our daily life, are simply the embodiment of our duty. Now in looking around us we find that other egos, or Selves, are engaged in similar duties; perhaps they co-operate with us in our daily tasks. This gives us the idea of the well-regulated household, the law-abiding community, the civilwhich each individual has his ised State, in special work to perform, but where all co-operate for the welfare of the whole. Thus Fichte is leading up to the idea of the infinite Self, of which are all fragmentary manifestations. We can never fathom the greatness of this infinite Self, but in doing our duty we come to realise that we are living in a world of common tasks, in a world of moral order, whereof we are all instruments. This, as most of you are doubtless aware, entirely agrees with the immortal teaching of the Bhagavad-Gitā:

"O Gudakesha, I am the Self, seated in the hearts of all beings; I am the beginning, the middle and the end of all beings."

After this brief and hasty sketch of the idealistic philosophy of Fichte, let us now turn our

attention to the country where those doctrines were applied.

Prussia, the largest State in Northern Germany, rose to great distinction and fame among the nations of Europe under its King Frederic the Great, who reigned from 1740 to 1786. It was he who carried on for seven years that famous war against the great Empress Maria Theresa of Austria, in which he was first defeated but finally victorious. It was during this seven years' war that Frederic had to defend himself single-handed, at one time, against the united attacks of Austria, Russia and France. But Frederic showed his genius as military commander by holding his own against those three Powers; and he even gained in the end the large province of Silesia for Prussia, as the result of the war.

Now Frederic was not only a great general; he showed himself equally capable as a ruler, when the war was over. He governed his kingdom in a homely, patriarchal fashion; his power was not limited by any parliament, but he considered himself the father of his people, and he would see above all that every one of his subjects got justice. For this purpose he established the new Court of Appeal in Berlin, where even the case of the humblest and poorest citizen might be tried. The famous story of the miller of Sans-souci shows that the great King had a true sense of justice.

Near Sans-souci, the country residence of Frederic the Great, whither he would retire to throw off the cares of State, and to enjoy the pleasures of literature and music in a circle of chosen friends,

a miller lived whose property bordered on the royal domain. The crude and inartistic shape of the mill offended the King's sense of beauty, it obstructed the view of the scenery behind, and the noise and clatter of the machinery disturbed the King, when he was at work. So he sent for the miller one day, and said: "My good friend, how much will you take for your property? Your mill causes much disturbance to us, and so we have decided to buy it from you and have it removed." "Sire," said the miller, "I cannot sell my property, because my heart clings to it. This mill was left to me by my father, it has been in our family for several generations, it is impossible for me to part with it."

"We shall pay you a good price," said the King, "now tell us your terms."

"I cannot, Sire," said the man, "I cannot sell my mill."

"Well, my good man," said Frederic, who was after all an absolute ruler and not used to be opposed by the will of any of his subjects, "I think we have the means of making you yield to our reasonable demand. I shall have your property estimated and you shall be paid the price that it is worth."

"But I cannot be made to sell my property against my will," said the miller, gathering up all his courage. "I shall lay my case immediately before the new Court of Justice in Berlin, which your Majesty has founded; where the judges decide according to the right, and where also the voice of the poorest and humblest man is heard."

The King was profoundly touched by the words of the miller and by his simple faith in the integrity of the judges which were appointed by the Crown.

"My good man," he said, "since you believe that you will get justice in our realm, even if your claims were to conflict with the personal comfort of your King, I shall not disappoint you in this belief. Go, your property shall be respected."

But although Frederic had undoubtedly great qualities as a ruler, he cannot be said to have been a promoter of the national unity of his Kingdom. He was, in the first place, like so many European sovereigns of his time, an ardent admirer of the great absolute monarch Louis XIV, whose influence was felt even during the century following his death. To Frederic the French Court with its stately etiquette, its splendor, its elegance manner, was a model of perfection; and the French civilisation with its grace and artistic refinement was the ideal according to which he tried to shape his life and surroundings. Sans-souci was Versailles on a small scale; and Frederic surrounded by his literary friends was a faint reflection of the great French monarch in the midst of the splendid array of statesmen, poets and men of genius in every The great Prussian department of national life. King, like many of his contemporaries, had also such a profound admiration for the language of France that he used it in preference to his native tongue; and he thought that the German language was altogether too, crude and undeveloped to

express the ideas of a higher civilisation. The rising German literature of the time received no encouragement whatsoever from Frederic; he had no taste for the Messiah of Klopstock, but he delighted in the stately measures of Corneille and Racine and the witty sayings of Boileau and La Fontaine.

But there was another reason, why the throne of Frederic the Great did not represent the true national life of the country. Frederic was a profound believer in the superiority of the upper class, the aristocracy of the land, which gave rise to a kind of a caste system and caused a wide chasm between the nobles and the middle class. It is true, the Prussian King would speak of himself as "the first servant of the State," and he would banter with his grenadiers and men of the lower classes; but when it was a question filling high positions in Government or of creating officers for his army, none but men of noble birth were eligible candidates. The King believed, in fact, that only an aristocrat could have the intelligence and presence of mind, the courage and dash, which he so much valued in his military leaders.

The upper classes, in their turn, knowing that the King attached so much importance to birth and rank, came to have an undue estimate of their position in the national household. Like the King, the great nobles of Prussia would prefer to speak the French language, they would dress in the French fashion, and live in the French style. They employed French cooks and French dancing masters, and would look down on the whole of the merchants and mechanics of their native |country. There was

also a most objectionable practice which prevailed, at that time, on the estates of the great landholders in Prussia, namely that of villeinage, or serfdom, which bound the laborer, so to speak, to the land on which he lived, and made him practically the property of his master who gave him food and shelter. It is true, he could not be sold like the negro slaves in America: but he could not leave his place and enter the service of another master; he belonged to the property. It almost goes without saying that those poor people were without even the most elementary knowledge of such things as are now well taught in every village school. There were some schools for the common people in existence in Frederic's time; but the teachers in those schools were mostly the King's old veteran soldiers, who were, of course, without any professional training, and who mostly considered the cane to be the best means of helping on the progress of their pupils. The discipline was harsh and the standard of education low. Gross ignoranceprevailed among the people of the middle class, the merchants and mechanics, whose interests were centred in their shops, their family affairs and their personal comfort. But they had not the faintest ides of duties to the community or to the country There was neither public spirit nor large. patriotism.

What do we care for the quarrels of the great! Let the affairs of the world go as they please, provided that we are safe and have the means of existence. Thus many thought and spoke; but they were rudely awakened from such selfish thought by the great misfortunes that came over their country, which roused in them the sense of duty and made them realise that they were all of a common blood and belonged to the same race.

In 1805 Napoleon had crushed the power of Austria by defeating her combined forces in the great battles of Austerlitz and Wagram.

If Austria had been joined by Prussia, at this juncture, the result might have been different; but King Frederic William III of Prussia, although noble-minded and patriotic, had neither the ability of Frederic the Great to anticipate events and to prepare for emergencies, nor his military genius in planning campaigns. So he kept aloof instead of helping Austria; but he had to learn to his sorrow that by his hesitation he had by no means averted the fate he feared from his own country; for now Napoleon turned his forces northward and inflicted such a crushing defeat upon the army, which only fifty years before under Frederic the Great, had gained such glorious victories, that the bulwark of the Prussian monarchy seemed to be broken, and the deepest discouragement and helplessness prevailed. But this was only the beginning of a series of trials through which the nation had to pass.

After the fatal battle of Jena in 1806, Napoleon proceeded still farther north towards Berlin, the capital, and nothing seemed to check his progress. A complete panic had come over the Prussian Generals and Commanders-in-chief; one fortress after another would capitulate, often on a mere rumor, and large portions of the army would fall into the enemy's hands, sometimes before a single blow had been

struck. Often the very mention of Napoleon's name acted like an evil spell which seemed to paralyse the actions of his opponents. The capital was now quite unprotected, and the King with his family and the Court fled to Koenigsberg, a city in the eastern part of the Kingdom, not far from the borders of Russia. But the inhuman conqueror having left a French garrison in occupation of Berlin. followed the sorely-tried Monarch to the very boundary of his kingdom; two more bloody battles were fought in East Prussia, in which Napoleon was again victorious, and then the melancholy Peace of Tilsit was concluded in 1807, by which Prussia lost half her territory, namely, all the land from beyond the Rhine up to the river Elbe, and had to surrender all her military forces, except 42,000 men.

But the year 1807 marked the climax of the sufferings of the unhappy country and a change was at hand.

Even before the defeat at Jena some able and self-sacrificing men in Prussia had planned various reforms, especially along educational lines, which were soon to be put into practice. Among those who fully realised that Prussia, nay Germany, could only regain her lost position among the nations of the world by a moral regeneration, was the great philosopher Fichte.

"If the Self creates the world, and not an external Deity, then we are responsible for what comes into our lives, as individuals and also as a nation. If we are fallen now, as a race, through ignorance, selfishness and indolence, we are not the victims of a blind fate, but we are reaping what

we ourselves have sown. But by the inborn power and vitality of the Self, we can re-shape our lives and form the future destiny of our people."

This was the note of hope which the philosophy of Fichte sounded at a time of despair, when Prussia was still under the hypnotic spell of the French Dictator; but it was one of the most effective means of breaking this spell.

Fichte's ideal, as we have seen, was the great co-operative Commonwealth, the image of the great Self, in which every member of the community has his individual task assigned to him, but in which all are tied by indissoluble bonds of duty and affection to the State as a whole.

But how could there be a feeling of one-ness between the people, if wide gulfs separated the classes that formed the nation from one another, and if barriers were erected between brothers and those who shared the blood of the race? So Fichte saw that, as the first step towards the unity of Prussia, the patriotism of the people had to be aroused, and that is what he set himself to do.

In the year 1807, from December to March, on successive Sunday evenings, Fichte, who was Professor of Philosophy at the University of Berlin, delivered in the great hall of the Academy of Sciences, before crowded audiences, his famous Addresses to the German Nation. With the eloquence of a great orator he reminded his hearers of the greatness of Germany in the past, of the ancient traditions of the people and of their former union in one mighty Empire.

"Rouse yourselves," he called to them, "shake off this lethargy, this faint-heartedness, and show that you are the worthy descendants of those who stemmed the tide of Roman invasion, in ages past, and who conquered the freedom of the ground you tread, the very air you breathe, by defeating the legions of the mighty Augustus Cæsar. But you must stand united, ready to serve the land of your fathers, for divided into factions and classes you are no match for the powerful enemy."

Now Fichte thought that the ideal of national unity could best be realised by a system of common education. Knowledge is certainly a great leveller, and when people are thoroughly educated, class distinctions and caste prejudices, which are mostly the outcome of ignorance, naturally vanish. Education also gives the people a true conception of enlightened citizenship and their duties and privileges in the great national Commonwealth.

The general principles of Fichte's scheme of education which he expounded to his audience, were later carried out by the Prussian Government, and largely form the basis of the German public school system at the present time. Like other great educators of the time, Pestalozzi and Froebel, Fichte believed that the object of education should be an all-round harmonious development of the human nature in the child, that education did not only mean the cultivation of the intellect, but that it included the training of the moral nature, as well as physical culture, and the acquiring of technical skill.

Such and similar questions Fichte discussed in that memorable winter of 1807 to 1808, in the hall

of the Academy of Sciences in Berlin. But it took no small amount of personal courage to deliver such a series of lectures at that time. In 1806 an anonymous pamphlet had appeared bearing the title Germany in her Deepest Degradation, for the printing and publishing of which the unfortunate bookseller Palm at Nürnberg was shot by ofder of Napoleon. Now, when Fichte gave his Addresses to the German Nation, the French were still in occupation of Berlin, and some well-known spies were frequently seen in the lecture hall.

Other great public speakers, like the philosophers Schleiermacher and Wolf, had been cautioned by the French commandant; but fortunately the French authorities did not take much notice of Fichte's orations; the only reference made to them in a French paper was that a certain philosopher by the name of Fichte was lecturing in Berlin about a reform in education.

But Fichte was not working single-handed for the rebirth of his country. Prussia was fortunate in having at that time two highly-gifted and noble-minded ministers at the helm of the state, Hardenberg, who brought about the Stein and most important reforms. Both were imbued with the same ethical and patriotic spirit as Fichte; they were fully convinced that the salvation the country was only to be found in the unity of the people, and they promptly adopted such would bring about this result. methods as they set themselves to work with might and main to annul the old laws of land-tenure, and the result of their noble efforts was that villeinage was

abolished, and every serf on the large baronial estates was set free.

An equally important reform was that local Government was granted to cities and municipalities all over the country. The wise men at the head of the Government saw that such an institution would tend to knit the citizens more closely together, that it would awaken in them the feeling of responsibility, and prepare them for unselfish service and loyalty to their native country.

About the same time, an excellent public school system was put into practice. The State, realising its duty to provide for the education and training of the people, made it obligatory for the parents throughout the land to send their children to school up to a certain age; and a well-qualified body of teachers, filled with the ethical enthusiasm of Froebel and Fichte, was put in charge of the young to train them in the ideals of the nation.

There was only one more thing to be done to fit Prussia for her struggle for national independence, and that was the raising of the military forces. This was, however, a difficult problem, for Napoleon had limited the army of the country, as mentioned before, to 42,000 men. The Prussian Government was not entitled to keep more than 42,000 trained soldiers, and with such a small force it was impossible to succeed against the vast legions of the French conqueror.

But the great Prussian minister of war, Scharnhorst, was equal to the occasion; 42,000 men were levied, put through all the necessary military exercises and drill, and when sufficiently trained, they were immediately disbanded. Another set of 42,000 men was draughted, drilled and again dismissed to make room for fresh recruits coming in. In this way all the able-bodied male inhabitants of Prussia, except the aged and the very young, were in a comparatively short time converted into trained soldiers, yet the limit set to the standing army by Napoleon was never exceeded.

This method of keeping large reserve forces on hand, in addition to the regular army, was kept up by the Prussian Government and later adopted by the united German Empire; and it is owing to this method, without doubt, that the German army now-a-days is one of the most formidable war engines in the world.

But you will be surprised to hear that the new military system in Prussia actually became the means of binding the people more closely together, for there was a strong democratic element in it.

The army had formerly been extremely unpopular in Prussia, because it was an institution which emphasised the hated class distinctions more than almost any other. It was completely controlled by the aristocracy, because, according to the regulations of Frederic the Great, no one was eligible for the position of an officer who was not of noble birth. The young men of the middle class could formerly only serve in the ranks. But after the terrible defeat of Jena, in 1806, it became evident that the title of a count or baron did not necessarily qualify a man for a military leader, and that the officers needed training as much as the common

soldiers. Therefore it was deemed necessary that henceforth every able-bodied man in the Prussian army should be put through a rigorous system of drill and military exercises of the most elaborate kind.

From this time on, the son of the great Prussian land-owner could be seen standing in the ranks side by side with the son of the merchant or the mechanic from the next town; and an officer's commission was no longer exclusively reserved for noblemen, but was equally granted to men of the middle class.

And now the time for the great struggle approached. In 1813, about six months after the main strength of Napoleon's army had been broken by the terrible winter campaign in Russia, the Prussian Government thought it advisable to form an alliance with Russia and to declare war upon France, with a view to shaking off the yoke of Napoleon and of regaining its national independence.

It was in March, 1813, that Frederic William III issued his famous proclamation, called 'Appeal to my People,' in which he called the men to arms against the common enemy and oppressor of their country. This proclamation was spread instantaneously all over the land by means of the press; it was posted up on all the street corners and public buildings, and one could see large crowds gathered in front of it at all times, reading it with the greatest interest and showing signs of deep emotion. Their beloved monarch, whose sorrows and trials they had all shared in that time of deepest humiliation, this monarch called his sons to arms

to repair the damages inflicted upon their native land and to save their national existence and honor.

You will realise that there was a hearty response to this appeal; but no one can imagine the enthusiasm that prevailed all over the country, unless he has read the history of the time:

It was no war between the Thrones and Powers, It was a crusade, was a holy war,

as one of the contemporary poets sang. Men were flocking to the standard from every province and district; they left the plough, the workshop, the office, the mansion; the academic lecture-halls and the class-rooms of the two higher forms in the schools were left empty, because the students, the younger teachers and professors, had marched to the front. One could see old veteran soldiers, who had won laurels under Frederic the Great, accompanying their grandsons with tottering steps to the military headquarters, and offering up the most precious thing they had to their beloved King in the defence of their native country.

You could see widows holding their only sons in a last embrace and then sending them off with their blessing to "fight with God for King and native country," as the phrase ran.

And when the forces were all collected, and the necessary funds were raised, the army was placed under the command of such able Generals as Blucher, York and Buelow, and the first engagements with the enemy occurred in the neighborhood of Berlin, around the capital of the country. But those battles were no longer defeats; the victories at Grossbeeren, Dennewitz and on the Katzbach

river, showed that Prussia had learnt her lesson from the unfortunate war, and that the spirit of hope and a manly confidence and resolution had found entrance again into the hearts of the people.

Then the allied Powers, Russia, Austria and Prussia, assembled their forces in the plains of Leipzig to inflict the final stroke on the tottering giant.

For three days a bloody and most desperate battle was fought on that old historic ground; the fighting was going on in three places at the same time; the city of Leipzig was in flames, and death was reaping a large harvest. But the Prussian nation regained her lost independence in this world-famous contest, for the French army was completely routed, and Napoleon was sent to the isle of Elba as a prisoner of war.

Thus we see how the rebirth of a nation was brought about; we see that it was done in the first place by giving the people a sound education, and further by overcoming class prejudices, by fostering the spirit of brotherhood which sees in a nation only a family on a large scale, and by being ever ready to remove barriers between the children of the same mother. This, it seems to me, is a lesson which might be learnt by India, or by any other nation in the world.

So we have tried to show that the intellectual and moral regeneration of Prussia, in 1813, might be considered a vindication of the philosophy of Fichte, it being a glorious manifestation of the power of the Great Self, which refused to be conquered by an adverse fate. It is this divine Power which ever teaches humanity the lessons of self-sacrifice and devotion, which leads individuals as well as nations through fiery trials, in order to bestow upon them in the end greater freedom, greater power and the blessings of a higher and more perfect civilisation.

THE TEACHING OF SAMSKRT

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It is generally admitted that the study of a classical language is an important element in any curriculum of higher education, and, is felt that no system of intellectual and moral culture can complete without a fair acquaintance with a classical language and its literature. From this point of view, the study of Samskrt may be seen to be of the highest importance in the education of Indian youth. But Samskrt is more, much more, than a classical language to the large majority of Indians. It is the language which enshrines our religion. our philosophy, our traditions, our history, indeed the whole record of our past civilisation and our past culture; and thus, though technically dead, it is really living, and influencing our life and thought. It becomes therefore the duty of every Indian, at least of every Hindu, who would be cultured, to make himself thoroughly acquainted with the Samskrt language and literature.

In order that a thorough study of Samskṛṭ may be possible, it is necessary that the teaching of Samskṛṭ should be carried on so as to make the study easy and interesting. I offer here a few considerations on some methods of teaching Samskṛṭ. In the first place, then, it is necessary to make

the boys feel that a knowledge of Samskrt is necessary, not only for the purposes of examinations, but for acquiring a sound culture and for enabling them to follow a life based on the true principles of their religion, and directed to the true service of God, Man, and the Motherland. teacher should therefore try to teach Samskrt not as a strange and unfamiliar second language, but as the mother-tongue, or rather the mother of the various tongues commonly spoken in India. This could be easily done by taking many words from the spoken languages of India and showing how the same words appear in the same senses in Samskrt. It should also be pointed out how, not only words, but also the ideas found in Samskrt literature are essentially the same as those which we hold at present about men and things generally. In order that this may be facilitated, it seems to me necessary that the teachings of Samskrt should be done through the medium of the Vernacular rather than of English. I have found that this not only lessens labor, but also strengthens the idea of Samskrt being our own language, and not a strange and unfamiliar tongue. It lessens labor, because it obviates the necessity of trying to understand one unfamiliar word through the medium of another which may be and often is as unfamiliar, or at least not quite clearly apprehended. Moreover, it often happens that the meaning conveyed by a Samskrt word is not translatable into English, but is very easily conveved by a word in the Indian Vernaculars. I have often marked, moreover, that the habit of trying to remember the meaning of Samskrt words

by their English equivalents breeds the mechanical habit of cram. Often the Samskrt word is the same as the Vernacular word, and needs no explanation at all to be apprehended. What use for instance is there in making boys repeat that were means a garland, or that was means the ocean, when the boy already knows what they mean? I remember how as a boy I learnt by heart that we means to wallow, and never understood either what we meant or what wallow meant, till in a much higher class I knew that wallow meant the same thing as the Marāthi word wallow, which is obviously the same word as we. I remember also how in explaining to boys the following line from Raghu:

पयोधरीभूतचतुः समुद्रां जुगोप गोरूपथरामिवोवीम्

I found it very difficult to explain the metaphor completely in English, but it became a comparatively easy matter when put into Marāthi, for the idea is quite familiar and even common to Hindū boys, and only becomes incomprehensible when presented through English.

In teaching Samskrt at school we have to teach the rules of Samskrt grammar, and then to make the boys familiar with the reading and construing of easy passages from Samskrt literature, so that later on they may be able to study that literature for themselves. Now there are two methods on which Samskrt grammar is generally taught in our schools. There is the method of the Samskrt pandit, proceeding on the traditional pedagogic lines by means of sutras, and generally depending upon the memory of the boys. It is plain that if an exhaustive, accurate and scientific knowledge of Sams-

krt grammar, which is a highly complex system, were needed, this is the only method by which it could be gained. But by this method the study of Samskrt grammar will take a longer time than the boys in our schools can afford. Moreover, our boys cannot give to Samskrt grammar that exclusive attention, which the use of this method demands from the students. I venture also to think that for the purposes of a practical acquaintance with the less abstruse forms of Samskrt literature, which is all that our universities demand and which is all that is necessary for the purposes of general culture, a scientific knowledge of Samskrt grammar is not needed. This system therefore does not seem to me to be appropriate for adoption in our schools, though it has a certain element which is of great use, especially in the case of Indian boys. I am referring to the importance given to memory, for I think that a purely analytical method, however well adopted to the needs of Europeans, is not quite suited to the needs of Indian boys, who have by a long heredity come to depend more or less upon memory as a means of intellectual culture. I also think that this pedagogic method, coming directly into striking contrast with the methods on which all the other subjects are taught to the boys, is bound to appear singular, and this impression of singularity must make the study itself look peculiar and therefore more difficult. What is necessary is that out of the great mass of the complexities, the intricacies and the elegancies of Samskrt grammar, a selection should be made of those portions which are of value from the practical point of view,

referred to above, and this portion should be taught, with a due importance being attached both to memory and to analysis.

This has been most successfully done by Dr. R. G. Bhandarkar, the venerable director Samskrt studies on the Bombay side. His system combines the merits of both the pedagogic and the analytical systems, though—with all deference to the venerable doctor, who has been the teacher of the teachers of my teachers, and still continues to wield a beneficent influence upon academic studies in Bombay-I venture to say that the rules, as expounded by him in his books, tend to be a little too technical and often rather incomprehensible to young boys, on account of the extreme specialisation of language attempted. With competent teachers this difficulty of course disappears, and those who, like me, have had the advantage of good teachers, have nothing but the highest praise for the doctor's methods, and are proud to declare that that method had made Samskrt grammar an easy matter for us.

The other method is the analytical method followed in the books on Samskrt grammar written by European scholars. This method gets rid entirely of any appeal to memory, and depends upon students grasping certain rules and principles. Now there is no doubt that this method gets rid to a large extent of mechanical drudgery, and serves as an admirable stimulus to the intellect by encouraging the habit of thinking. But I think the method tends to become a little too complex for Indian boys and is not quite suited to their

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needs, as a strong memory plays a not inconsiderable part in the intellectual make-up of our boys. The many rules, with exceptions and counter-exceptions, rather bewilder the youthful student, and force the teacher in many cases to beat a rather undignified retreat from analysis and to fall back upon memory. Another difficulty with regard to the method is that the books use conventional phrases Latin grammar to interpret the terms Samskrt grammar, with the result that the student -not being accustomed to this phraseology, either in his own Vernacular or in English grammar, which he generally studies before he begins to study Samskrt grammar-finds himself quite confused with these strange words and phrases. I have often found boys taking words like 'Ablative,' 'Preterite,' etc., as terms of English grammar and using them in parsing English sentences, thus making a sad muddle. The whole difficulty could be avoided by using the original Samskrt names, for they are already familiar to the boys in their Vernaculars. I was myself under a serious misapprehension as to the exact nature of the passive voice in Samskrt, I was constantly .. introducing the rules English grammar into Samskrt grammar, deluded all the time by the name; and I am quite sure that the name कमीण प्रयोग would have prevented all mistakes.

On the whole it seems to me that the best way of teaching Samskrt grammar is to combine judiciously the pedagogic and the analytical methods and to use the terminology of Samskrt grammar, not of, course the highly specialised terminology

of the Sûtras. The general rules and principles, which cover a large number of cases, should be stated as rules couched in easy terms; while all details, and exceptions as well as those principles, which are only applicable to a limited number of cases, should be left to be learnt by rote. instance in the conjugation of verbs, I should trouble the boys by detailed rules the ways in which the particular terminations arrived at. These I should let them learn by rote and would only give to them as general rules, the principles, according to which changes take place in the root, when these terminations are affixed. I only give this as an instance: there are many other cases, in which the same method may be followed with success, as I have found by experience.

The use of the vernaculars as the medium of instruction helps considerably in the study of grammar. The most striking example of this is the way, in which the संधि rules, which are such stumbling blocks to the beginner, can be relieved of all their difficulty, by pointing out that they are almost exactly the same as those which are used in the Vernacular. Speaking for Marāthi, I can say that with the exception of the rules about विसर्ग संधि and a few relating to च्यंजन संधि all the rules are the same as those in Marāthi.

Turning to the study of Samskrt literature, I have generally found that in the case of young students great benefit may be gained by making them construe sentences without having previously gone through the vocabulary, which is generally supplied in all Readers. The words in the Samskrt

are generally exactly the same as those used in the Vernacular, and speaking for Marāthi I can say that about eighty per cent of the Samskrt words are either the same as Marāthi words, or may be easily shown to be Marāthi words with a little obvious modification; and I think that the same is the case as regards most of the Indian Vernaculars. As I have already referred to this point above I need not labor it any further here.

I venture to think that the Direct Method, as it is called, is not suited for the teaching of Samskrt. The direct method serves admirably when you wish to pick up a spoken language and to pick it up only for the purpose of being able to converse in it. But Samskrt is not a spoken language, neither is anything gained by boys being trained to converse in Samskrt. I also tend to think that a highly cultivated language like the Samskrt-where most delicate and most various shades of meanings are attached to words, according to their use in different places, and where, not unoften, the same word is used to express different ideas at different times, or even many ideas at one and the same time—cannot be adequately learnt by the direct method of conversation. I am strongly of opinion that students trained on the direct method will find the more subtle beauties of Samskrt literature very difficult to comprehend, and the people who get weary of being told of these beauties and the way to find them seem to me to be those who have been brought up on the conversational method in their linguistic studies, to the exclusion of the literary and scholarly method, or who look upon the ability to

converse in a language as the perfection of linguistic proficiency. As our object is to understand and appreciate Samskrt literature, I think the best method to follow is the scholarly method.

Coming now to the actual study of the masterpieces of Samskrt literature, it seems to me that in this branch of study a little too much weight is attached to what is called Critical Scholarship, and no room is left for the appreciative and sympathetic methods of the true lover of literature. The dates of authors, the discussions of various readings, the comparison of various recensions, form the bulk of our studies at college. The appreciation of the beauties of style and thought, the study of the principles, and the methods of the author's art, and all that is included in the literary and æsthetic appreciation of literature, is neglected. We know all about the various theories as to the probable date of Kāli Dās; we can discuss learnedly the various readings in the Shakuntala, but we hardly know any of the shlokas in it by heart, and we can scarcely appreciate the art with which Kali Das develops the character of his hero. I have met many graduates who can discourse learnedly as to whether the Shakuntala or the Vikramaorvashishyam was prior in date, but do not understand why people are entranced when they read such shlokas as पातुंनप्रथम् व्यवस्यतिजलंपुमास्वर्पातेषुया, etc., in the Shakuntala or उपस्याः सर्गविधौ प्रजापतिरभूचंद्रोनुकांतिप्रदः etc., in the Vikramaorvashishyam. I am mentioning here an actual fact in my own experience, not a merely imaginary case. Indeed the great masterpieces of Samskrt literature are to most of us very tiresome

books, because we connect them with various readings and discussions of dates. I do not say that critical scholarship is useless; indeed I value it very highly, for I know that a dead language like the Samskrt, the books in which are all manuscripts, could hardly have been understood in all its beauty and glory without the aid of critical scholarship. I also know that we owe a great deal of our historical knowledge of ancient India to critical scholarship and that, but for the labors of critical scholars, many of the most valuable of ancient Samskrt works would never have seen the light of day in a presentable garb. But I do say that criticism has up to now monopolised our attention towards Samskrt literature, and we must, if we are to make Samskrt play a part in our intellectual and moral culture, take to a literary, sesthetic, appreciative, sympathetic study of that literature.

Another point in this connexion is that in the study of our great masterpieces, like the Mahā-bhārata and the Rāmāyana, or the Gītā, there is a tendency to treat them as no more than reading books. I think this is not quite as it ought to be. First of all this leads to our paying entire attention to the words rather than to the spirit, and thus makes these store-houses of spiritual knowledge lose their real meaning. Secondly, it breeds in young minds a certain contempt for these great books, a contempt, which people always feel towards books which are fixed in their minds as text-books at school or college, and therefore often derided, often cursed! One could never expect the right attitude towards these books in the minds of young men

so long as we do not teach them, on their first acquaintance with them, to regard them as sacred. or at least as standing in a class entirely different from that of the ordinary books of study. Let us in teaching these books inculcate the necessity of studying them with reverence, with humility, with enthusiasm. Let us bring to their minds the greatness and the holiness of the Rshis who wrote them. Let us impress upon them the greatness and sacredness of the spiritual knowledge contained in these books. Let us make plain to them how this great spiritual teaching is often concealed below the surface, and clothed in such terms that it requires deep thought, constant and persevering study, and a calm, open and pure mind to grasp it. We must teach them the danger and the madness of hasty and immature conclusions about these things, and above allteach them the art of suspending judgment rather than contemptuously dismissing certain things as childish or useless or wicked, because they cannot understand them at the first attempt. Thus alone can we bring back our young men to the unprejudiced study of their religion, history, and traditions.

In connexion with this topic I should like to refer to the habit of mind, which imagines that we fully understand, and explain the meaning of our philosophical or religious doctrines, when we substitute for the Samskrt words some high sounding technical terms of western philosophy or religion. Thus we think that when we translate sign by monism, should by spirit, and so on, we have explained the terms fully, and therefore that no more

study or investigation is necessary. This is a habit which ought to be avoided, for otherwise we shall never be able to grasp our own theories, or judiciously to compare them with western ideas. And a large part of the confused ideas with regard to the real meaning and import of our philosophy and religion in the minds of our young men is due to this indolent habit of expounding philosophy and religion. I know of an instance: a friend of mine went for long under the delusion that the Upanishats were not meant for devout Hindus, because they taught the doctrine of adada, which had been translated to him as meaning 'Agnosticism'.

EDUCATION AND DISCIPLINE

BY

IQBAL NARAIN GURTU

The need of proper education and discipline has always been felt and recognised at all times and in every civilised country. Various theories of education have from time to time been put forth and followed by different nations, and perhaps at no time have the theories been more at variance with each other than they are at the present day. In fact so many different theories have been advanced that a considerable amount of confusion has been caused, and the ideal, instead of becoming clearer and more definite, has become more vague and indefinite.

sociologist believes in the instance. a growth of society under the pressure of surrounding circumstances only, and traces its beginning from the attraction of the two sexes towards each other, which led to the formation of the family unit. Afterwards the different families threw in their lot together and formed a tribe, in order that they might grow sufficiently strong to defend themselves against the aggressions of their neighbors. the neighboring tribes drew together, order to protect themselves from the outside hostile pressure and formed into a nation. A theory which explains the growth of social qualities entirely under the pressure of surrounding circumstances of more or less hostile nature, which neglects altogether the unfoldment side by side of the inner and latent divine powers in man reacting on his surroundings and thus considerably moulding and modifying them, is bound to affect the ideals of education and discipline to a very large extent. The sociologist will necessarily put a premium on discipline on individualistic lines, and education from his point of view would consist in training every child in a way that would best fit him to successfully fight the battle of life, and enable him to push himself on over the heads of others.

Then, again, the theories of psychology based on a materialistic view of man's nature have profoundly affected the ideals of education and discipline. The denial of, or at least a lack of, definite belief in the existence of the soul, and the practical rejection of the principle of Reincarnation have reduced the child to an intelligence which is merely the product of the brain and nervous system, built up by the laws of heredity working through long ages, and he is considered to be a creature entirely new to the world and entering it for the first and the last time. A child is taken to be a being merely made up of a physical body with undeveloped senses and brain and having certain potential capacities based on physical heredity only and moulded by surrounding circumstances. The result of such a view of man and his life is that the ideal of education is narrowed down to the training and development of the physical body, the senses and the intellect.

The keen industrial competition between the nations in the West has created a large and ever-increasing demand for the type of education which

will train every man to earn his living, and allow him to rear up his family decently and comfortably amidst the ceaseless struggle all around. There is at present a growing danger of the ideals of education becoming too low, sordid and narrow. In fact there are many who maintain strongly that the evils resulting from such a view of education are no more remote possibilities but are already too manifest.

Then again, the modern democrat in Europe and America, while trying to apply the principle of brotherhood to human conditions, is eager to build a social system in which equality of rights is to be the watchword, and insists on giving equal and similar opportunities of growth to all. This democratic idea has brought about a sort of dead uniformity in discipline for all without due regard for the differences based on heredity and the capacity for receptivity and growth in every individual.

There are thus certain distinct drawbacks in the modern system of education. Firstly, the training and development of intellect is given an undue prominence, either by entirely neglecting other important constituent elements in man or by assigning to them quite a subservient and minor position. Secondly, there are very few basic principles on which a clear, permanent and an unchanging ideal of education can be formed. Thirdly, the necessities of the moment are allowed to decide matters for the time, and the niceties and details of pedagogics so much engross the attention of experts that the true ideals are, more often than not, lost sight of altogether. The constantly changing ideals in matters

educational are truly signs of a lack of grasp of true principles, and not of rapid growth and evolution, as is very often claimed.

Theosophy has given to the world a real and definite conception of the inner constitution of man, and has thus made it possible for us to formulate clear principles which are of universal application and are suited in the main for all times. It gives us a distinct advantage by enabling us to clearly distinguish between the everchanging and the more or less permanent principles in man's constitution. We, therefore, tread on a surer ground, and while we clearly see the necessity of the growth of each of the several constituent elements in man, we are able to attach to each its proper and relative value, and to give to each its proper place and precedence according to its permanent or fleeting nature.

What then are the principal teachings of Theosophy which help us in the solution of the educational problem? They are: That the child is an immortal Individual not taking birth for the first time amongst us, but having taken hundreds of such births before; that in every birth he had stored up certain experiences and carried them on with him in succeeding births; that the store was every time after death wrought into faculties and transmitted to the next incarnation in the shape of character; that his receptivity in every incarnation was considerably conditioned and limited by his past. It is really the child's past which determines the degree of response to the influences brought to bear on him from outside in the present. When the

nature and the constitution of the ego, the doctrine of Reincarnation and the working of the Law of Karma are properly understood, the meaning and scope of education become clear and the methods then easily suggest themselves.

In order to understand our duty towards the child and the education and discipline necessary for him, we must trace him from his last incarnation to the present and closely mark the process and the intermediate stages gone through by him. In his last incarnation he must have had a definite disposition of his own, a certain character containing some good and some bad qualities more or less developed; when that life came to an end and the physical body was cast off, the good and bad qualities remained intact with him in his astral and mental bodies. After some length of time his astral body, which was during his life on earth to a great extent vitalised by indulgence in particular desires and emotions, became gradually devitalised by a slow process of natural exhaustion and was ultimately disintegrated like the physical. But the germs of those passions remained with him though for the time being ineffective, because desires always require for their manifestation astral matter which in this case has been disintegrated. Later on, even his mind-body, with which he used to work in his life on earth, also dropped leaving behind the germs of its qualities with the true ego which then went into long rest. Centuries later, after enjoying the heavenly rest, the ego prepared himself to reincarnate, and had to reverse the previous process and to pass downward through the same conditions of existence

through which he had passed in his upward journey to the heavenly world after death. He clothed himself first with a new mind-body and then with a new astral before taking the physical birth. By the natural law of attraction the ego aggregated around himself out of the great store of the surrounding matter of the mental and the astral plane just that part of each which would serve as a fit vehicle for the expression of those qualities and desires which he had in his previous life or even lives.

There is one very important fact to be remembered in this connexion, and it is that when a child is born his mental and astral bodies are very plastic and not at all definitely formed. They simply contain the germs of qualities which have influenced the selection of a particular combination of mental and astral matter, which might serve as a possible field for the growth and fructification of those germs. Any of those germs may be nourished and developed, or atrophied and starved out, by the influences brought to bear upon the child from outside. Here lies the real field of education and the true scope for discipline.

At first sight the field seems to be very small, leaving but a narrow margin for our efforts, but a closer view of the situation makes the responsibilities of the parents and teachers very heavy and serious indeed. Wise parents will always study the child and try to understand the real indwelling Ruler, wishing to express himself through the young body. A general mistake, which is unfortunately very often made by parents is that they do not treat with sufficient reverence the ego clothed in

his new garments. They too often take it for granted that the young body must necessarily contain a young soul, and forget that the immortal Individual in the child body may perchance be more advanced and wiser than themselves. very often foolishly dominate the child, instead of holding him a sacred charge entrusted to their hands. duty of the parents as regards education and discipline really lies in moulding and giving a definite shape to the three new young and plastic bodies -the physical, the astral and the mind body-that the ego has taken for himself in the present birth. Just as the physical body can be considerably moulded and the little child can be turned in future into an acrobat, if he is so trained at an age when his bones and muscles are soft and supple, similarly can his astral and mental vehicles be easily moulded when they are readily impressible and have not acquired set habits which, when once firmly established, cannot easily be changed. Every moment the germs of good or evil brought from the past are roused into activity, and the subtler vehicles side by side with the physical are being gradually built up; and it rests entirely with the elders to make the conditions of the child's development such that the germs of good may grow while those of evil may die out.

The influence of the life of the parents over the child is universally recognised among all civilised people, but the idea is very often only confined to that portion of life which expresses itself in outward conduct, in words and deeds. People will be very careful not to say a word or do an act in

the presence of the child which would in any way produce a harmful influence over him, but what they unfortunately do not realise yet is the mighty force of thoughts and emotions, which do not show any visible immediate effect in the outside world, but are more real and lasting and have a profound effect on the subtler bodies of the child. The best education for the child in its earlier years really consists in the self-discipline of the parents themselves, particularly as regards their thoughts and emotions. Any coarse thought or unhealthy emotion in the parents, even though never expressed outwardly, produces violent vibrations in their own subtler bodies and acts on the mental and astral bodies of the child, infecting them like contagion and stimulating the seed-germs of evil in them. On the other hand, if the atmosphere surrounding the child is of pure and loving thoughts and noble and unselfish emotions, the germs of good will be intensified. Similarly, when the child begins to grow a little older and his vehicles are partially built up, any weakness that he may show can only be cured by opposite virtues in the parents. The influence of the parents, therefore, should be not only of a negative nature but also positive. They should not only harbor no thought or desire which they would not like to see reproduced in their children, but should also studiously cultivate in themselves lofty noble desires, thoughts and particularly virtues opposite to the defects which they may notice in their children. If the parents and elders would only keep the above principles in mind, and let the children grow in surroundings of beauty, purity,

peace, harmony and love, there will be very little need of imposing any external discipline on them. Lessons of good manners, cleanliness, proper attention to sanitary laws, and to simple physical exercises can be taught by gently and clearly explaining to them the laws of nature, and why obedience to those laws is necessary. In fact a recourse to any kind of repression would become quite needless.

After the child grows a little older he is usually sent to a school, and there it is necessary that the organisation should be on a family basis and worked on exactly the same principles and in the same spirit as the family. The school, in fact, ought to be an extension of the family, where teachers are to take the place of parents, and the senior boys and girls of the elder brothers and sisters, where the obligations of each towards the others are mapped out on the lines of obligations fulfilled in the home. A teacher who feels proud of his work and considers it a privilege to be allowed to train young can, if he so chooses, draw his inspiration for his noble task from the great Hierarchy of Teachers who rule, help and guide the destinies of the world and its people. Humanity, with all its supposed wisdom, is nothing more than a child to Them, and the Great Beings as its elders have imposed upon Themselves the task of guiding its steps, onwards and are anxious to train it in order that some day the child may grow to Their own height, to be able in its turn to stand in Their place and to pass on to later humanities the wisdom and experience learnt from Them. With ceaseless vigilance and unbounded compassion They work for

unity where we in our ignorance act for separation, and, ever seeking to quicken the evolution of the race, They labor for peace and harmony where we in our blindness are swayed by passions. In the great task of uplifting humanity They show profound love, illimitable tenderness and untiring patience. Gentle beyond the reach of imagination, They never constrain the will of human beings, and while They never allow the divine plan to fail through our ignorance, They simply direct and supervise, leaving us free to work out details according to our individual capacity. They constantly give us help of which we in our pride are very often unconscious, and patiently wait for the time when, learning the value of Their help and the futility of our own small plans, we may voluntarily approach Them with devotion and reverence to co-operate with Their work.

The schoolmaster ought, therefore, to try to be at least a faint reflexion of the great Teachers in the Spiritual Hierarchy. He must realise the nobility of his vocation and understand that it is the life of the teacher that tells, and not his precepts or intellectual cleverness. He cannot discharge his tremendous responsibilities, and has really no business to undertake them, if he is not prepared to make an earnest effort to root out from his nature the exhibition of those tendencies which he would condemn if they were shown by his pupils. He must understand that the only way in which he can draw out all that is best in his pupils is by winning their love and confidence, and this can only be done by his showing the virtues

of love, gentleness and patience towards them. He should not impose his will too much by extorting discipline and by inspiring fear, but should try to understand his pupils and make them feel that their teacher is their guide and friend. Harshness is always fatal to the success of the work of a teacher, and no attempt should be made at exacting obedience without giving an opportunity to the pupils to comprehend the reason of the instruction given to them. Where the teacher has a little patience and takes pains to make clear to his pupils why they are required to follow a certain course, there is always a ready, willing and intelligent cooperation on their part, and a more permanent and lasting effect on their minds. With patience, gentleness and love he can always succeed in striking in the hearts of his pupils a note of personal devotion, and in creating a strong tie which binds them to him and impels them even unconsciously to range their wills on his side.

Personal devotion to the teacher does invariably produce in the heart of the pupil reverence for his superiors, a ready recognition of greatness, and a willingness to give to the person having knoweldge, purity and nobility of life the power to guide and the authority to direct. It is only when the modern spirit of self-assertion, based on a blind faith in the limited consciousness of one's own narrow self—in other words one's own ignorance—will be replaced by that true spirit of humility which leads only the few to-day to tune their narrower judgments to the wider, that it will become possible for the larger and therefore the higher to enlighten and

strengthen the smaller and the lower. Too much is very often made now-a-days of self-confidence and self-reliance, which, if kept within proper and legitimate bounds, have for the large mass of people a certain amount of use; but the democratic and individualistic spirit of the present day has led to an apotheosis of these virtues, and produced a definite barrier between us and the great Guardians of Humanity, who are always only too anxious to help, but whose helping hand we in our pride and ignorance so contemptuously reject. A spirit of reverence, which is ever ready to recognise superiority and greatness no matter where and in whom it may be found, is therefore an asset for humanity, and should be assiduously cultivated in boys and young men by their teachers.

Another equally important virtue is the virtue of trust, without which many good schemes fail in this world. It cannot be acquired by merely preaching trust, but by building a character that will attract confidence. Here, again, the teacher does by his own life influence a large number of young men, and not only wins their confidence but helps them to show in their own nature the qualities that secure trust. This 'spirit of mutual trust will inevitably make the brotherly feeling grow very strong in the tender hearts of boys, who will form themselves into a real brotherhood, where elders will voluntarily help the youngers and the equals cling together; where all will breathe the atmosphere of love: where ties of affection will be created which will in some cases not only last for one life but will bring the loving hearts again and again together in lives to come, wherein each will play his respective part amidst the varying scenes of the wonderful drama of human evolution.

Where there is love there is sacrifice, an overpowering desire to give and to pour out, a feeling of unspeakable joy in abstaining from personal gratification in order to be of some service to the object of love. A young man who is devoted to his teacher and has learnt to trust and love others will very soon learn to sacrifice for others, to be devoted to the common interest, to regard the interests of others as his own, and to care more for the happiness and comfort of others. No service that he can render to others will be too small for him, and he will take trouble as pleasure with a smiling face. Later on in life, "his little, nameless, unremembered acts of kindness and of love," unceasingly performed at school and college, will distinguish him in his own country as one of its foremost public-spirited citizens, and perchance in the world as one of its greatest benefactors.

With reverence, trust, help, love and sacrifice, the virtue of co-operation should be allowed to take firm root in the character of a young man, if the ideal of brotherhood is to become for him a reality and not merely a lip talk. He should learn to make himself a part of the whole, to fit the smaller into the larger, to sink the personality and to work for the common weal. The school games are the most important means whereby an effective training in co-operation can be given to boys. They should be taught to play not only for the pleasure that it brings to them, nor merely for the improve-

ment of health, but chiefly for the sake of the school to which they belong. When they play they should play well, not for their own name or glory but for the honor and good name of the institution to which they belong.

The virtue of co-operation based on the ideal of brotherhood; is still more necessary in view of the fact that it will in future replace the present day individualism which leads to competition. The brotherhood of man is the cardinal creed of the Theosophist; it is to be the basis of society for the coming race. The so-called pressing necessities of the moment, which to the average man mean so much and so profoundly affect his views about education and discipline, for the Theosophist pale into insignificance before the future that awaits humanity. With a broader range of vision and a wider outlook, he begins to see the things and events of the present in their true perspective, and makes the future the keynote of his activity in the present, rather than let the everchanging demands of the present limit and condition the future. He should, therefore, do all that he can to make the ideal of love, brotherhood, co-operation and peace a living. ideal, which will move and animate the teacher and the pupils in every educational institution.