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OCCASIONAL REPORTS

No. 7

METHODS OF SCHOOL INSPECTION IN ENGLAND

H. G. WYATT,

Inspector of Schools,

Rawalpindi Division.

Occasional Reports

No. 7

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PREFACE.

THE publication in India of a work dealing with school inspection in England may appear to call for some apology. As the author states, the English elementary school is a very different thing from the village primary school in India. if the writer has succeeded in drawing a faithful picture of a certain field of educational activity, he has accomplished his object, whether or no the lessons inculcated have direct bearing on Indian problems. Further, there is much in the present volume which will be of practical value in India. the system in India is still far from having reached the complexity involved in European organisations, it has nevertheless begun to present problems, such as those of correlation and the functions of special inspectors, whose handling in England is here described. The history of inspection (and, one may add, of school instruction) has passed through similar phases in England and in India. India too has witnessed a revulsion from 'grind' and from examination; inspection has ceased exclusively to regard the pupil and the results of instruction and has tended to focus rather on the class and the teacher's methods. Some think that the pendulum has swung round too far and may learn from Mr. Wyatt's pages how rectification has been attempted in England. Again it may be objected that the lessons of the book can appeal only to a small band of workers-a band too whose efficacy and even the necessity of whose existence is sometimes questioned. Even if this were so, the objection would not be valid. But, as a matter of fact, there is much in these pages to interest the teacher as well as the inspector. The treatment of inspection necessitates some treatment of school organisation; and two of the chapters deal more with the latter than with the former subject.

H. SHARP.

Educational Commissioner with the Government of India.

Simla, 1917.

Introductory Note.

The following chapters convey impressions of the work and conduct of school inspection, mainly with reference to elementary schools, gathered in company of a number of English inspecting officers of every grade, and both of the Board of Education and of Local Bodies, during the months April to June, 1916.

Owing to the interruptions and disturbances in inspection caused by the war, I was unable to see formal inspection either of secondary schools or of training institutions; but I had the advantage of conversation and discussion with officers engaged upon inspection in educational institutions of every kind, as well as with headmasters of important schools, medical inspecting officers, and others. Antongst the many who went out of their way to help me, I am particularly indebted to Mr. F. T. Howard, Mr. H. Ward, and Mr. G. H. Grindrod, Divisional Inspectors in London, the North-West, and South-West, of England, respectively, Mr. T. W. Twentyman, for the use of books and rooms in the Board of Education offices, and to Mr. C. H. B. Dale, C.B., Chief Inspector of Elementary Schools, for so kindly making provision for my tours.

For the benefit of Indian readers I should explain that the English Elementary school is a very different thing from the village primary school in India. Though its pupils leave at 12 or 13 years of age (and sometimes earlier) its curriculum is far more ambitious than that of an Indian primary school, and it is staffed by teachers often of a level of education equivalent to that of headmasters or senior assistants in modern Indian High schools. Possibly the nearest approximation in the level of attainment aimed at is afforded by schools intermediate between the primary and high school in India, namely, the middle school of the Punjab. But no exact parallel exists. Certainly in its relation to the work of inspection, in the qualities it demands in an inspector, and in the appropriate procedure, the Indian High school has more resemblance to the English elementary, and to the local English secondary, school than the Indian primary school has to either.

Methods of School Inspection in England.

CHAPTER I.

Historical Note.

1. Before 1860.

Inspectors of schools were first appointed in England and Wales in the year 1839.

Throughout English history education had been mainly in the hands of religious communities, which, with the growing recognition of the need for a more complete and thorough system of public education which characterised the nineteenth century throughout Europe, found themselves unable to satisfy the demand. Consequently the nineteenth century is a period in which the deficiencies of voluntary effort are being gradually made good by the State, which strengthened its control over elementary education in successive stages as the people and the religious denominations themselves became more willing or less reluctant to accept aid and a proportionate measure of control in a task to which the people as a whole in the person of the State was alone adequate.

Without direct legislative enactment grants to aid local effort in building schools for the poor were given from the Treasury as early as 1832. These were made through existing religious agencies, the most important of which were the National School Society (representing the Established Church) and the British and Foreign Bible Society (mainly Non-Conformist). The annual vote was at first £20,000, and not only was far from supplying the felt needs of the situation, but was not accompanied by conditions ensuring its economical expenditure.

In 1839 when the grant was increased to £30,000, a Special Education Department was created to supervise the work, comprising a special Committee of the Privy Council and a staff of officers, amongst whom were inspectors of schools.

The policy of the Government at every step which it has taken in developing public education, has aimed consistently at supporting and supplementing, rather than at superseding, voluntary enterprise. And it has recognised from the beginning the historical claims, as well as the actual advantages, of religion as an influence in any general educational system. There was indeed no practicable alternative, for what public education existed was—as it had always been—chiefly in the hands of the Church, a fact it would have been impolitic, if not impracticable, to ignore.

The mistrust and opposition which the idea of Government inspection of schools under religious bodies not unnaturally aroused was removed by the so-called Concordat of 1840—a Minute necessitating the approval of the Archbishop to appointments of inspectors of Church schools in his province. Later Non-Conformists and Roman Catholics received a like privilege for their schools. Thus it came about that in practice only clergymen—of whatever denomination—were appointed inspectors for Church schools, and inspectors were definitely urged by Government to encourage and foster religious teaching in all State-aided schools. This policy of suiting the religious denomination of the inspector to the schools continued for thirty years, during which period the number of appointments, only two or three in the first year, had risen to twenty-three by 1850 and by 1860 to sixty-two.

Except for a temporary establishment of a class of assistant inspectors about 1850, the system of entrusting the inspection of schools to a uniform grade of inspector continued till 1860, when under a Revised Code the manner and objects of inspection changed. At the time of the first appointment of inspectors the grants given were in aid of the provision or maintenance of school buildings, including also, after 1843, equipment and the building of training colleges. the principle was introduced of making direct payments to teachers, both on account of pupil teachers in training under them and, under the name of augmentation grants, to trained teachers in proportion to the length of their training. And in 1853 a further system of capitation grants based on a minimum attendance was introduced for schools in rural, and afterwards in other, districts. There were thus three systems of grants at the time-building and capitation grants paid to managers, and additions to salary paid directly to teachers.

These years 1840—1860 may be taken as a first stage in the history of school inspection in England.

The general objects of school inspection may be conveniently distinguished as—

- (1) Discovering school needs;
- (2) Estimating school worth;
- (3) Guiding school progress.

In practice emphasis upon the first two objects varies with the conditions of grants-in-aid; according, that is, as the award of grants is determined by the actual requirements of the school to bring it up to a recognised standard or by the educational merits of the school at the time, the policy of Gevernment may be either to supply want or to encourage merit.

During the early years of inspection the first named was the object kept mainly in view. The objects of inspectors were mainly to collect facts and information and to report the result of their inspection to the Committee of Council (Minute of 2nd September 1839).

The chief purpose of Government in the early years of its interest in public education, before a really national system was created, was naturally to gain an adequate knowledge of the needs of the situation. The Inspectors were investigators, rather than active promoters, of education. The Government indeed was inclined to proceed the more cautiously in face of the mistrust of Government interference in institutions maintained by religious denominations, when the doctrine of laissez-faire was also part of the fashionable philosophy of the day. Inspectors of schools are accordingly cautioned 'not to interfere with the religious instruction, or discipline, or management of the school, and the grant is made to meet the necessities of the situation, not against any educational evaluation of the school as it exists.'

Within a few years however, the character of the inspectors' work underwent some change. When in 1846 the building grants were supplemented by grants made direct to teachers, the duties of inspectors expanded. Regulations were now framed making certain qualifications in the staff and standard in the teaching a condition of the new grants. It now became an inspector's duty to examine pupil-teacher apprentices, to hear all lessons given by them and to report upon the organisation, discipline and instruction of any school under a teacher claiming an augmentation grant. In other words the emphasis which had hitherto fallen upon the first object of school inspection—discovering a school's needs—now falls equally

upon the second; estimating (for grant purposes) the school's worth.

Already in 1846 the inspectors had been too few in number to pay even an annual visit to each aided school, and it became the more urgent, as their duties and the number of assisted and inspected schools grew, to enlarge the inspectorate considerably. Its establishment had risen from under twenty in 1845 to sixty-two by 1860.

After 1846 accordingly the inspection takes on the character of a modern school inspection, viz., an intensive consideration of the organization, discipline and instruction of each school as it is visited. In other words the internal coudition of a school assumes an equal place with its external or material condition. Thus the briefly tabulated reports which have been preserved from dates prior to 1860 include observations on the topics which are commonly considered to-day, viz., building, furniture, apparatus, registers, organization, discipline and instruction. In addition the fitness of the certificated teacher for training apprentices is especially noticed. These summaries of reports do not throw much light upon the actual procedure of an inspector in treating any particular school; though it is easy to construct a fancy picture. The inspection of the material circumstances of a school does not lend itself, however, to much variety, except in detail. And it would be superfluous to dwell upon the differences in standard of lighting, ventilation and general convenience, expected of a school between those days of amateur commonsense and the present period of scientific exactitude. An important question of that epoch, for instance, was not whether desks were properly graded for pupils of various size or shaped to support the small of the back, but whether they were sufficient in number and in good repair. The word organization did not appear to include, as now, the distribution of teaching periods in a time-table, or of work amongst the different members of the staff, but comprised only the number of classes into which the school was divided, (with a note as to any collective grouping), and the way in which the classes were seated-whether in the inspecting terminology the seating was quadrangular, rectilinear, semi-circular, or according to some other geometrical figure. The following are examples of a common type of entry—

(1) 'Organization, six classes the same for all subjects; shape, semicircles; collective groups for geography, history and grammar.'

- (2) 'Organization, eight classes, shape squares, under one master and one assistant.'
- (3) 'Organization, three classes, not the same for all subjects; shape, circular, under a mistress and an apprentice.'

In other cases the shape of the class is described as quadrangular and rectilinear' or 'parallel' or again in one case 'parallel and three sides of a square.' The inspectors of those days appear to have been satisfied provided the arrangement was an easily describable geometrical figure. As these tabulated reports were for the information of the grant-giving authority, the absence of remarks upon the time-table, upon the devices or methods of teaching and of suggestions for improvement, may not be specially significant.

Some light on inspection procedure is thrown by Matthew Arnold's account, written in 1863, of what he names the old system of inspection. 'The inspector,' he says, 'took a school class by class. He seldom heard each child in a class read, but he called out a certain number to read, picked at random as specimens of the rest; and when this was done he questioned the class with freedom, and in his own way, on the subjects of their instruction. As you got near the top of a good school these subjects became more numerous; they embraced English grammar, geography and history, for each of which the Inspector's report contained a special entry, and the examination thus often acquired much variety and interest.'

Though the context of Matthew Arnold's comment shows that he was considering one aspect of inspection only, it is probably safe to conclude that the inspection of those days concerned itself mainly with the pupils and their attainments, less with the teachers or their process of teaching.

The grant was given or withheld according to an evaluation of the school, including primarily an estimate of the standard of instruction. In a period before the process of teaching had been generally recognised as an art, capable of a variety of methods, and in which the mind of the pupil—so far as it was considered at all—was regarded as a receptacle for knowledge rather than as an instrument for using it, it was natural that the cultured gentlemen then chosen to inspect the schools—inexperienced as they often were in teaching—should estimate the instruction according to the quantity of the pupil's knowledge, and ignore his power of putting it to practical use; and, so far as the teacher was considered it was

rather his general personality, his reputation with his neighbours, his power of maintaining discipline and securing attendance, and his influence for bad or good that counted to his credit than any special expertness in teaching as such. The questions unconsciously before the inspector were, of his pupils, 'what do they know?' and of the teacher 'what is he like?' or 'how does he conduct his school?'

The plan of appointing only inspectors of religious denominations acceptable to the schools-invariably clergymen in the case of Church schools-affected to some degree the character of the inspection. Each denomination naturally wanted to secure the especial progress of the schools in its care and as full a measure as possible of Government aid. Inspectors tended to be chary of reporting unfavourably on schools of their own persuasion, and to select the good points for especial notice. 'An inspector,' says Matthew Arnold in his general report for the year 1854, 'is apt to be silent on imperfections lest a statement of them may unfavourably affect a struggling school, he is reluctant to disappoint a manager or estrange a subscriber, whereas one inspector should not conceal defects as an advocate for the schools, while another exposes them as an agent for the Government.' 'The inspection of a school is run,' he says, 'upon a plan founded when a far smaller number of schools were under your Lordships' supervision than at present, carried out into such detail as to afford every facility to an inspector, desirous to give a favourable report upon a school, for doing so, by enabling him to call attention to special points of detail in which the school may be strong, rather than to others where it may be weak, or to its general efficiency, which may be small. At present, for instance, an inspector finding an advanced upper class in a school, a class working sums in fractions, decimals and higher rules, and answering well in grammar and history, constructs, half insensibly, whether so inclined or not, but with the greatest ease if so inclined, a most favourable report on a school, whatever may be the character of the other classes which help to compose it. But it is evident that the attention of your Lordships is especially concentrated upon those other classes, and that an elementary school excites your interest principally as it deals with these, as it deals with the mass of children, who, remaining but a short time at school, and having few or no advantages at home, can acquire little but rudimentary instruction; not as it deals with the much smaller number, whose parents can enable them to remain long at school, to

pursue their studies at home, to carry on their education, in short, under favourable circumstances, and who therefore lessneed the care and assistance of your Lordships.'

That a probable consequence of assigning to schools inspectors of the same religious community as themselves is to divert the inspection from its proper object of exposing the defects in a school with a view to their removal no less than of revealing its excellences with a view to their encouragement is a point of practical relevance in India.

Matthew Arnold evidently thought that the existing system made for narrowness of aim in inspection and hindered the inspector from forming a simple judgment of the conditions of the school as a whole, based upon an inquiry into 'certain broad and ascertainable things; on the one hand, the commodiousness of the school buildings, the convenience of the school fittings, the fulfilment of the necessary sanitary conditions; on the other the competence of the teacher, the efficiency of the discipline, the soundness of the elementary secular and (in certain cases) of the elementary religious instruction.' Inspectors would not then 'occupy themselves in inquiring with what success the three or four head boys (sons, probably, of tradesmen in good circumstances) out of a school of a hundred or a hundred and fifty children, could work an equation, or refer words to their Greek or Latin constituents.'

2. The Revised Code of 1860.

The changes which were made in the Revised Code of 1860. affected considerably the spirit and manner of inspection. The commission which sat in 1858 found the existing provision of schools for the people tentative, unco-ordinated, indequate, and inefficient. And amongst the defects of the system wasrecognised a superficiality of inspection work, remarked upon by Matthew Arnold in 1854. The training of teachers hadalready been taken in hand as early as 1846, through a system of pupil teacher apprenticeship under a competent teacher in a school, supplemented by a course of study at a training college. It was found however that with the system of inspection in vogue the mere training of the teachers did not ensure efficiency in the school. Apart from its other purposes. of extending the supply of schools, of improving attendance, and of further encouraging local and voluntary educational endcavour, the commission aimed at improving the instruction in schools and at making the estimate of a school's worth-

depend upon a more thorough and comprehensive test than hitherto. In particular it was felt that a scheme was needed to extend the teacher's interest to all the children, to those in lower classes and of less intelligence, in order to counteract the tendency to select for special coaching a few privileged pupils at the top of the school. A more impersonal system of test would also withdraw the examination from the influence of local subscribers-it should no longer be diplomatic to give a little superfluous praise to the child of a local and wealthy tradesman. Accordingly the Code of 1860 which was based in the main upon the commission's report introduced certain important changes. The system of capitation based on attendance was modified by a condition, according to which, for twothirds of the capitation grants, each pupil who made a certain minimum number of attendances was examined in the three R's, and the grant was calculated upon, and varied with, the number of successful candidates. At the same time the augmentation grants paid as additions to their salaries to certificated teachers and to teachers giving training were given up; all grants were now paid to managers only.

When they became aware of the dangers of the new measure the authors of the revised Code were careful to represent the examination test as an assurance only of the school's baving reached a minimum instructional standard—once this was assured, the amount of the grant could depend upon other things besides the results of this test; for instance, the qualifications of the teachers and the general efficiency of the school were to be taken into account. The examination is to be only a part of the inspection-'inspection is the larger term, and includes a judgment founded upon an examination,......and upon other particulars also.' The scope of the inspector's duties is stated to be little changed, and the grant to be made to each school depends, as it has ever done, upon the school's whole character and work. 'You will judge every school,' say the official instructions to inspectors, 'by the same standard that you have hitherto used, as regards its religious, mcral, and intellectual merits.' In spite however of these well meaning cautions, the fact remained that in practice the bulk of the grant was calculated upon the results of individual examination and that each pupil increased or diminished the aggregate according as he passed or failed in the examination.

Besides this, the instructions to inspectors prescribed an exact procedure to be followed in the conduct of the examination, including the arrangement of the children, the mode of

dictation, the marking of the papers etc., and six standards of attainment were set for the respective classes. Those tests, it is to be added, included only the three R's, and in them were confined, in each case, to a very limited area. In arithmetic, for example, the test for standard VI is 'a sum in practice or bills of parcels'; that in reading for standard V is 'a few lines of poetry from a reading book used in the first class of the school'; that in writing for Standard III a sentence from a paragraph (from an elementary reading book used in the school) slowly read once and then dictated in single words.

It is not difficult to trace the effects of the new regulations upon the work of inspection.

The substitution for the old method of examining mainly orally a few pupils chosen at random from each class, of the new systematic examination of each individual pupil in three subjects, together with the entering of marks upon the schedule, compelled the inspector to spend much more time over this part of his duties than formerly; the more so indeed, as the number of inquiries and returns to which he had to give attention multiplied. If the inspector were to find time for the exercise of his own freedom in inspection it could only be by increasing largely the number of inspectors. This however had not been the intention of the Government. even when this measure gave material relief, it did little to liberate the inspection from routine methods, for the simple reason that-whatever an inspector's ideals-the circumstances created by the Code were too strong for him. It will be remembered that the teachers no longer drew part of their pay direct from Government; they made their own bargain with the managers. Consequently they were thrown more into the managers' hands. And as the managers naturally wanted the biggest possible grant for the school, they held the teacher responsible for passing through the examination all the pupils he could. This meant an overpressure upon the weaker, and a corresponding neglect of the stronger, pupils in an endeavour to range all along a common level sufficient to secure a pass. And as the subjects of examination were confined to the three R's and to certain very limited subjects or acquirements within them, the teacher naturally restricted the studies of his pupils to them. Where the inspector had no time to spare, he equally was obliged to confine his examination to the subjects, and those parts of them, given in the schedule. But even if he had time for further examination, he could not expect to combat the general spirit of the school. Provided

the teachers had done their part in passing each pupil through the Government examination, to condemn the school and deprive it of grant for deficiencies, which the authorised official system of examination itself entailed, would have been inhuman and unjust.

The result of the new system accordingly was to degrade the inspection to a mechanical routine. The method of the inspector was practically prescribed for him-his individuality had no more free play than that of the teachers he inspected. And the schools inevitably tended to become uniform machines for producing pupils specialised in one or two intellectual tricks or acquirements. The new Code in fact really defeated its own object. It had aimed at correcting the tendency to judge a school's worth on an appreciation of a few bright pupils by spreading the examination over the whole school; and the tendency to idiosyncrasy of treatment by standardising the subjects of examination throughout. In actual fact however what the examination gained in range it lost in depth; it substituted a shallow and uniform test of all for an intensive and varied treatment of some—instead of appraising the many attainments of a few the inspector now investigates a few (prescribed) attainments in the many.

In such a case rule of thumb methods of inspection became inevitable—the test was necessarily expeditious and uniform, for in no other way could it be effected in the time or an even standard of judgment be attained.

A further obstacle in the way of forming a fair judgment. of a teacher's work, or of the progress of different parts of a school, was presented by the fact that the pupils came up for examination by standards, not by classes. Pupils submitted for the same standard of test might come from different classes, with the result that the inspector no longer examined a classas a unit and could form no impression of its progress as a whole. The new system in fact diverted the inspector from his proper duty of estimating the school as a school, that is, as an agent for the general development and improvement of its pupils, by prolonging his concentration on a few points only. And the pupils in the top classes were now as much neglected as they had been favoured before. As their examination was also confined to a few elementary exercises in the three R's, clever pupils received no credit for any further progress of which they were capable in those subjects or in others, such as history, geography, geometry or English

grammar, while the teacher accordingly transferred his ministrations from the pupils who were safe to pass to the dullards in danger of failing.

3. 1870-1890.

The year 1870 witnessed the passing of an Act making provision for the establishing of school boards in areas where voluntary schools did not supply the need for schools, for the imposition of a local rate for the purpose of starting and maintaining schools and for the passing of by-laws, making school attendance compulsory. The Act in itself did not affect the prevailing main principles upon which the grants-in-aid to schools from the imperial exchequer were regulated, and the consequent methods adopted by inspectors in examining schools; but with the establishing of state schools not under denominational management the old system of assigning clergymen to inspect church schools, and lay inspectors approved by Roman Catholic or dissenting bodies for Roman Catholic or Non-Conformist schools, was given up. After 1869 the religious tenets of applicants for inspectorships were not considered, and no clergymen were appointed-inspectorships fell in the main to young men of good university degrees and accepted social status, and the country was divided into smaller inspection areas for the inspection of schools of all types, replacing the previous larger cross divisions on denominational Moreover the inspector was in future concerned only with the instruction in secular subjects, the testing of the religious teaching being undertaken in Church schools, by diocesan inspectors appointed by the Church authorities 'ad hoc.' The Act also necessitated an increase in the number of inspecting officers. Already in 1863 the exigencies of 'individual examination' had led to the creation of an 'assistant inspector' class to help in the work of examining the pupils in the three R's, and by 1868 there were twenty-one assistants and seventy-five full inspectors. These assistants, intended for the largely mechanical work of individual examination in very elementary subjects, were men under thirty from the class of trained elementary school teachers, and were at first empowered only to examine pass or reject individual children presented under the school standards, and that in the presence of the examiner. The Act of 1871 somewhat widened their duties-a good deal of statistical work, the scrutiny of registers, revision of pupil teachers' papers and

the inspection of buildings, for example, were entrusted to them, their pay was raised, and promotion to a sub-inspector class to be afterwards mentioned was made possible.

The need for equalising the standard of examinations presented a difficulty, which it was attempted to meet by entrusting to some of the senior district inspectors the supervision over a number of districts. They were expected to check and standardise the questions and working of local inspecting officers, but in point of fact their efforts in this direction were not very effective. In 1871 there were seventy-six assistant inspectors, eighty-two inspectors and ten senior inspectors, and the present system of dividing the country into ten divisions, with usually some eight or ten districts in each, dates from this period:

The carrying out of the Act involved much executive work not directly educational, such as the drawing up of regulations for school board elections, dealing with applications for establishing school boards, or for building grants (from voluntary schools), returns as to the supply of schools in different districts, and so on. For this purpose 'inspectors of returns' were appointed, one for each district, often from men with a legal training. Many of these afterwards became ordinary inspectors, and as the Act came into normal working they ceased to form a separate class. In 1871 they numbered sixty-three.

Though the period from 1870 to 1890 was one of great expansion in the provision of public elementary education, it was also one during which the actual practice of inspection was at its worst. The Revised Code of 1860 had established a bad tradition which persisted indeed till the end of the nineteenth century, and has prolonged some of its evil effects even up till to-day. The main work of the inspector was not inspection but examination; his attention was focussed not on the school as a whole, but on the surface only of a narrow area of instruction; he was obliged to consider within this area not the process of instruction, but a brief show of results, and that except in reading on paper. This naturally restricted his outlook and threatened to degrade in time his educational Moreover the science and art of elementary education were as yet in their initial stages; there was no generally accepted body of principles based on a scientific investigation into young human nature, and the inspectors themselves-at

any rate up till 1882, and frequently afterwards—chosen from young men with good university degrees and of accepted social standing came usually to their life's work with little knowledge of either the theory of education or of the schools which they were appointed to inspect, and between them and the teachers in social status and in their general education the gulf was fixed wider than it is to-day. To the 'gentle-man' inspector the public elementary schools were institutions for the lower orders with whom he could come into merely official contact. Class pride forbade his association with the teachers, differences in upbringing made it in any case difficult, for the teachers had come from the schools-in still cruder stages-in which they taught. The healing of the breach has been awaiting the influence of public education itself. If the assistant inspector, on the other hand, was drawn from the classes whose children it was his duty to examine, yet his own meagre education was not such as to elevate his ideals above the bare requirements of his job, which consisted-it will be remembered-in a mechanical examination of individual pupils in a few acquisitions or attainments. The assistant inspector became indeed exceedingly expert within his narrow limits, but perfection, thus attained, means stagnation.

Besides this the whole educational system was de-humanised by an atmosphere of formality and officialism. The inspector himself was in fact-whatever the theory-the servant, not of the people, but of the Education Department at Whitehall. He was severely restricted by instructions tying him down to special methods and an exact procedure. As far as the actual work of examination went this was a vicious consequence of the system-for in a mechanical examination uniformity of standard can only be attained by identity of procedure. If one inspector, for example, read out a dictation passage twice before the pupils, and another once only, or if the numbers on one set of test cards were printed in words, and on another in figures, there could be no common measure of the results. Hence we find the official instructions of 1872 going into detail over methods. 'It is best to dictate the sums, or if cards are used, the numbers must be printed in words. When cards are not used, the dictation of sums must be the rule through all the standards.'

In dictation of sums the number should be given out according to the principle of numeration, e.g., 3,045 should be 'three

thousand and forty-five' not 'three thousands, no hundreds, and forty-five,' etc.

'Teachers must not go near the classes.

Problems should be given, but not exclusively.'

Nor was it only on the conduct of the examination that the Department dictated to the inspector; he was treated to official homilies on his general procedure in schools and his programme of visits was precisely pre-arranged, there was no modifying it at discretion according to his judgment of local requirements. The inspector, in his turn, tended to mete out the same measure as he received.

The memories of the older headmasters of to-day carry them back to the inspection of the earlier eighties; and make it possible to reproduce the picture of inspection day. In the village school it was the great day of the year, -and was carefully prepared for in advance. The head teacher, while neglecting the better pupils who were pretty sure of passing the examination, had drilled and driven the dullards-not without tears—to the requisite level of attainment; the 'readers' had been duly memorised, and a number of arithmetical exercises, garnered from schools previously examined from the inspectors' test cards, had been worked again and again to the point of mechanical perfection, while all the 'spot' passages in the general 'reader' had been repeatedly spelt through against the test in dictation. A day before the inspection was due the whole school had been swept and garnished, and the friendly gardener of the local squire had lent a number of flower pots to decorate the school surroundings.

On the day of inspection the assistant inspector arrived betimes and set to work to distribute questions and test cards throughout the classes, afterwards marking off such results as the intervals in the examination allowed. These were entered in a detailed schedule, and it required a good deal of care to avoid mistakes in the entries. While he was thus engaged the inspector himself arrived about 11 o'clock, looked round the school, put a few questions to the head teacher, questioned the classes in history and geography and perhaps grammar, and took the lessons of the pupil teachers. He would probably see a little of every teacher, if there were several, but paid no particular attention to the methods employed in teaching. If the school were a Church one, the local clergyman would come in during the inspection and he and the inspector would leave after middle day for luncheon at the Hall. The

assistant was left to finish the examination work, and on the results of the examination and any impressions that the inspector had formed by his own observation, the certificates of the teachers were endorsed.

It must not however be gathered from this account that the influence of inspection was wholly bad. It is true that the prescribed method of examination compelled the inspector to stereotype an evil system—it was not his fault if the teachers spent the year in a round of mechanical drill, or in devising tricks and subterfuges; though it is always an inspector's responsibility if he becomes known for one special line of questioning or a particular set of arithmetical exercises that results in the school's confining its attention to these. It was the system from which the inspection suffered, as did the instruction, for vain repetitions deadened the pupil's interest and the learning of rules without reasons suppressed his intelligence.

On the other hand there is some good in thorough instruction of almost any sort—the habit of doing a little perfectly, acquired in childhood, may persist through life; and the contention of some of the older headmasters of to-day that the substitution of more intelligent teaching and a wider and more varied curriculum has been accompanied with a loss in application and intensity on the part of the pupil, in slacker and less accurate working, has some measure of truth.

Apart from its effect upon the instruction, the inspection of those days—being a corollary of any grant-in-aid system—had naturally its good effect in keeping a school up to the mark in building, equipment, and the technical qualifications of the staff; for it was always open to an inspector to refuse to recommend a grant to a school on grounds other than that of bad examination results; and the inspectors did not confine their inquiries to the teaching. The better amongst the inspecting staff were indeed in constant opposition to the system which they had to work, and the dictum of one of the inspectors that 'the studies of the classroom must be those in which progress can be definitely measured by examination, and that there can be no definite aim, no real training without examinations' is probably exceptional.

A further circumstance in the education of the period affected the influence of the inspector upon the school and its teaching. As has been already indicated, every step towards the establishment of state control over education was jealously

watched by the voluntary agencies to whom the measure of public elementary education already existing in 1870 was due. If State assistance was to find favour with these, it was important to be chary of all unnecessary interference in school management. The consequence was that the official instructions to inspectors contained more than one warning against internal interference with the schools. In the official instructions of 1871, for instance, inspectors are told not to interfere with the responsibility of managers and teachers for the details of school work. 'The efficiency of their arrangements' it is remarked 'will be tested by the results produced at the annual examination.' In the instructions accompanying the Code issued ten years later inspectors are explicitly warned against originating or suggesting schemes of study; but they might approve or reject them.

The Government's policy of the maximum of non-interference compatible with the continuance of educational progress must have accentuated still further that detachment of attitude which had already resulted from the class aloofness of the time. The inspector of these days came into official contact with the teachers only in the school; association with them outside the school work was a thing unthought of. His personal influence suffered accordingly.

Before the last decade of the century however changes for the better had already begun to take place in the conditions of the Government grant and more especially in the curriculum. Even before the Act of 1871 the practice of basing the grant calculations upon the success of individual pupils in the three R's had been modified by adding grant payments on account of certain extra subjects, and for improvements in staff and on account of successful pupil teachers. After 1871 special grants were first made for individual pupils passing in the higher standards in not more than two specific* subjects—which had in such cases to be taught to the whole class on a scheme approved by the inspector.

In 1875 another important change was made in the award of grants on account of satisfactory work in 'class' subjects, in which the class work was estimated as a whole, and not according to individual pupils. The subjects that could be thus treated were grammar, history, elementary geography and plain needlework. Later on the range of 'class' sub-

^{*} Geography, history, grammar, algebra, geometry, natural philosophy, physical geography, natural science, political economy, languages.

jects was extended. This recognition of class teaching was for the good-it encouraged the teacher to consider the progress of the class as a whole, instead of paying special attention to the weak pupils and neglecting the strong. On the other hand the good resulting from the widening of the range of the curriculum by the addition of specific subjects was counterbalanced by the growth of a practice of 'cramming' individual pupils in extra subjects for the sake of the grant, and in an unnatural subdivision of subjects into the smallest branches which the Education Department could be got to recognise as a complete subject for the purpose. Thus physical geography was separated from general geography, euclid was separated from mensuration, and physics was split up into mechanics, heat, sound and light. An elementary school pupil might for instance offer physical geography while ignoring geography in general, and might acquire merit for himself and money for his school by accumulating scraps of knowledge disconnected one from another and all from the experiences of his every day life.

The practice of 'cramming' bright pupils with 'specific' subjects widened still further the gulf between the school and the practicalities of ordinary life.

The introduction of these changes in the grant-earning curriculum reacted upon the character of the inspectorate. Since 1863 the inspecting staff comprised two main classes, the superior staff of full inspectors-men of good university attainments, as a rule (though sometimes military or naval officers of no special experience or qualifications secured appointment)-and trained certificated elementary teachers. of some little school experience. These latter had been entrusted with the drudgery of examination. Of these two classes the superior class was prone to disdain the work of individual examination of pupils, the inferior class was, on the other hand, no longer equal to the more exacting and intelligent duties imposed by the inclusion of 'specific' and 'class' subjects for examination. There was indeed some ground in the complaint made in Parliament in 1879 that young men fresh from college, with no special knowledge of children or elementary education, were not fitted to inspect elementary schools. Undoubtedly they did not as a rule start their new career suited to the work of individual or even class examination, and frequently when they did not regularly undertake it, remained unsuited for this part of an inspecting officer's duties to the end. One solution of the problem was to promote schoolmasters to the post of inspectors, and in 1881 this step was taken by the creation of a class of sub-inspectors appointed from experienced teachers or headmasters of elementary schools or sometimes by promotion of older men from the assistant inspector class.

In point of fact the two inferior classes of inspector generally did the bulk of the work, though the superior officer remained responsible for every school report sent up from his district, and was expected to take a personal share in the examinations, to assess the grant, to endorse teachers' certificates, to visit in person every newly opened school, and any school the inspection of which he had left to his sub-inspector in the previous year.

The principle of encouraging progress in the instruction or otherwise in schools by paying for it piecemeal remained in force throughout this period. Granted that excellence—rather than the show of it—can be fostered by monetary rewards, the logical procedure, where any special defect in education becomes pronounced, is to offer money rewards for its removal. This was indeed the line actually adopted. And it is thus easy to trace from the changes in the incidence of grant the different steps in advance which the Government aimed at making between the year 1870 and 1890.

The grant for 'class' subjects, for instance, was to counteract the tendency to neglect the progress of the class as a whole, that for individual excellence in 'specific' subjects to revive interest in the more intelligent pupils, who under the old régime were left to themselves as soon as they reached the pass standard in elementary subjects. Other measures of the period exemplify the same general policy. To raise the 'elementary' instruction above a bare mechanical minimum, the 'standards' in the three R's were revised in 1871. An increase in grant in the same year where there was separate accommodation for infants indicates a recognition of their special requirements.

Singing received a grant in 1872. Attempts followed to give school work a more practical turn. The terms of the grant for science as a 'specific' subject were modified in 1875, to discourage 'rote' learning of mere information. A year later a premium was placed upon domestic economy as a specific subject for girls. Between 1880 and 1890 elementary science (or object lessons) became a 'class' subject

throughout a school—active observation was to temper the prevailing bookishness. On the girls' side cookery obtained a grant. A more advanced (or seventh) standard of instruction was established in 1882. Later on English was given preference as a 'class' subject. A 'merit' grant for organisation, discipline, the intelligence of the teaching, and the general quality of the school's work had been also introduced in 1881. In 1886 a Royal Commission was appointed to inquire into the working of the Elementary Education Act, and its report published in 1888 led to further changes in 1890. Meantime the chief features of this period have been described as a general rise in the standards of attainment expected, a continuance of emphasis upon instruction in English, and a recognition of the importance of practical training for girls.

The work of inspection, became, of course, correspondingly more complicated, and in greater need of experience and skilled guidance. The need for experience was recognised by the institution of the 'sub-inspector' class; that for guidance by the flood of circulars and instructions that flowed from the Department. The combined effect of these changes in curriculum and in the inspectorate and of the departmental instructions was to improve the general efficiency of inspection. Inspectors attended to a wider range of subjects, and more than previously to the class instruction as a whole, and within limits to the methods of instruction and to the general conduct of the school. The improvement in the prospects of the assistant inspector and the institution of the 'sub-inspector' class brought greater experience in dealing with the internal economy and the instructional condition of schools. The subinspector—an old teacher of ability—was less likely to be misled by tricks or showy teaching than the superior inspector or his less experienced assistant. His methods were more enlightened than the latter's and more penetrating than the former's: he knew the schools.

There were however two circumstances in this period that tended to confuse or impede inspection, a prevailing indecision or ignorance as to ideals or methods in school organization and teaching, and the system of subdividing the school's activities into watertight compartments for separate grants. Concerning the principles of education those practically interested in the subject had been gradually amassing experience and ideas, but it still remained to carry through the process of sifting and to establish agreement upon fundamental

laws. System and rationalisation were awaited. Thus the epoch was one in which the views of inspectors interested in educational progress proved often fragmentary, sometimes illadvised, and occasionally contradictory. In such circumstances in order to secure uniformity in practice regular instructions were issued to inspectors from headquarters. But unfortunately for this policy the central authority was involved in the same perplexity as its subordinates, and its instructions suffered from the hesitation and lack of conviction that come when principles have not been thought out. Nor, of course, will many of their recommendations survive criticism to-day. In 1880 for example the more than dubious method is prescribed of teaching the 'class' subjects (such as geography and history) through the medium of reading books, special sets to be provided for each subject, and confined to that subject only. Inspectors are warned that they may approve or reject schemes submitted to them, but may not originate or suggest schemes themselves. This is an impracticable compromise between the policies of encouraging the schools to govern themselves and the inspectors to guide their efforts, not only to estimate their worth.

Similarly another circular, after suggesting several objections to the employment of women teachers in the lower classes of boys' schools ends by permitting managers to try the experiment on their own responsibility. The Department had evidently not made up its mind as to the now recognised value of women in the education of little children of either sex.

The movements initiated from the Department were, however, mainly in advance, and inspectors stood to gain from their reception of new ideas and the general educational stir of the time. But so long as the system of individual examinations and payment for results continued, their methods could not make any definite break with the old routine; and the epoch 1870—1890 is one of comparative stagnation in the art of inspection. The work in fact was largely uninteresting; and the inspector relied upon his leisure hours for the chief relaxation and interest of life. He got his inspection over in the morning, and went shooting with the local squire in the afternoon.

The policy of distributing grants by items in a school's activities was a second hindrance to an inspector's efficiency. There were grants calculated on individual examination in elementary subjects, grants for this and that class subject,

grants again on account of individuals successful in specific subjects, grants for cookery and singing, and for discipline, organization and the general intelligence and quality of the school work.

The inspector's main attention was thus uniformly directed to the same succession of details in every school; there was scant time, whatever his inclination, to consider its individual possibilities or the broader aspects of school life. What pupils did outside the school, their games and pastimes and homework, their physical condition generally, their general reading, the unity of the curriculum or its suitability to local circumstances, the relation of the school to social and industrial opportunities, many of these important bearings of school life get little consideration.

4. After 1890.

The last quarter of a century has witnessed changes in the grant-in-aid system, and in the curriculum in relation to that system, which have resulted in freeing inspection from ulterior trammels for the valuable task of watching and guiding educational progress. The examination system has disappeared, and even the term 'inspection' is so changing its significance that it may soon become a positive misnomer.

In 1890 the system of calculating grants upon individual passes in the elementary subjects was modified. Since 1881 there had existed a fixed grant of 4s. 6d. per unit of average attendance, to be supplemented by amounts which varied with the percentage of total successes in the examination, a contrivance, be it noted, to prevent the presentation of pupils unlikely to pass. There was also a 'merit' grant, varying again per unit in attendance according as the school was adjudged fair, good, or excellent on the score of organization discipline, intelligence in the teaching, and the general quality of the work. These variables were now replaced by a 'principal' grant at 12s. 6d. or 14s. per unit on attendance, accord ing to the estimate of the inspector; and a separate grant of 1s or 1s, 6d. was assigned to organization and discipline. Thu the vicious principle of payment for individual results was given up. The grant for class subjects at 1s. to 2s. and those against individual success in specific subjects remained but except in the last case the grants were calculated upor average attendance.

Steps could now be taken to replace individual examinotions by better methods of estimating a school's worth: scheme of examination by 'sample' was introduced in 1890; each 'standard' was divided into three sections by the teacher. each of which was examined in a single one of the three elementary subjects, instead of the whole class being taken in all three. In 1894 inspection replaced examination in infant schools and departments. The next year the experiment was made in the Lambeth and Berkshire areas of a scheme of replacing examination by inspection in all departments and a tentative official recognition was accorded by a regulation introduced into the Code that same year exempting schools of special merit from examination provided two visits were paid to them in the year. During the next two or three years the new method of 'inspection' spread over the country. It was at first opposed by some inspectors and by a large number of teachers who knew their way about the old examination and had often become experts in bringing all their pupils up to scratch for its mechanical requirements. They objected to the indefinite nature of an 'inspection,' and where, as was not infrequent, their skill in 'cramming' their pupils was in inverse ratio to the intelligence of their methods, they naturally feared exposure of the hollowness of their teaching. the system of individual examination of pupils in the obligatory and specific subjects and of basing the grant aggregate upon individual successes in them had practically disappeared by 1897.

One further step has yet to be recorded before we examine the influence of these changes upon inspection and the inspectorate. The grants still remained adjudged against a number of separate subjects or groups of subjects. The 'principal' grant, introduced in 1890 to replace the separate merit and elementary subject grants, was still largely based upon the general attainments of pupils in the obligatory or elementary subjects, and in addition grants were apportioned on account of the class subjects at so much per pupil in attendance, while another grant was given on account of specific subjects. And there were grants or grant variations on account of needlework, singing, and drawing.

In 1900 thin system ceased. Except as regards cookery, laundry work, manual training, and (a new subject) household management, a system of block grants awarded, on one of two scales according to the inspector's recommendation, and upon

an estimate of the worth of the school as a whole, replaced the plan of calculating grants subject-wise. In other words, the school was at least freed from the necessity of considering how far it paid to give up one subject or take another or to give more attention to this pupil than to that. The curriculum could now be considered upon its intrinsic merits.

During these years a good deal had been done to make the curriculum more liberal and elastic, and to adapt it to the needs of the pupils. Encouragement was given to manual instruction for boys, and laundry work for girls. One class subject was made obligatory in 1893. Dairy work and housewifery were specially provided for, and the education of infants was reformed on Froebelian lines. Alternative courses were permitted in English, geography, elementary science and history. Military drill yielded place to more suitable physical exercises, including swimming, gymnastics and Swedish drill. On the whole more time was given to science, mathematics and commercial subjects, and to domestic subjects for girls and manual subjects for boys; while the literary side of the curriculum received less emphasis than hitherto.

This transition period during which the activities of the schools were being freed from the tyranny of commercialism and the curriculum was gradually coming to be based on educational grounds alone, was also one in which the old methods of inspection were giving place to new.

When questioned on his experiences of inspectors in the eighties and nincties an old headmaster instances his surprise, when during the period of examination of standards by sample, the inspector went so far as to let him make changesin the 'sample' sections to keep all the dullards from appearing in the same subject. The old days of punctilious formality in inspection, when it was not proper for the teacher toventure a remark unless first addressed, were passing away. A more human and natural atmosphere began to creep over the inspection; formality began to yield to friendliness. A chauge took place in the constitution of the inspectorate which indeed symbolises this. The body of inspectors, and the schools through them, were no longer solely controlled by impersonal mandates from Whitehall-a Chief Inspector of elementary schools was created in 1890 for the whole area of England and Wales. Centralisation by uniform prescription is being replaced by the more human method of co-ordination after personal discussion. A similarly 'human' measure was the appointment of women inspectors in 1896 for the inspection of

infant schools and the specifically feminine subjects-laundry, needlework, dairying, and domestic subjects. The increasing complexity and difficulty of the inspector's duties brought other changes. As individual examination ceased, the assistant inspector class needed improvement in quality and personnel if, with more varied curricula and more intelligent syllabuses, it was to continue to appraise the school work. In 1892 a qualifying examination was instituted for this class, and in 1896 the class designation lapsed: the old assistant inspectors became part of the second grade of the sub-inspector The class of sub-inspectors then took on some of the inspector's duties, and the number of full inspectors was correspondingly reduced. And with the growing insistence upon drawing as a regular part of the boys' curriculum, and of manual training as an ordinary subject in schools, specialist inspectors came in from the Science and Art Department South Kensington; till 1897 this Department inspected the practical subjects independently of the Board of Education and assigned them grants from its own exchequer. But at first these specialists were often military officers ignorant of the schools who carried out their duties perfunctorily and had a depressing effect upon the teaching.

The changes made in the grant system, the abolition of individual examination, the introduction of genuine inspection, the expansion of the curriculum, the greater freedom given to managers and headmasters in the choice of subjects and syllabuses, the appointment of specialist inspectors, and the insistence upon higher qualifications in the subordinate inspecting staff, coincided with a more or less general change in the spirit in which an inspecting officer went about his work. During this decade he was less rigidly controlled by official orders and instructions than formerly, and had consequently more freedom in arranging his inspection and inspection methods to suit his own ideas of the immediate requirement of his schools. Casual visits had for some years been definitely encouraged by the department, but it was not till 1895 that a formal annual inspection of each school ceased to be required. The cessation of these, and the substitution of inspection for examinations after 1897 paved the way for an alteration in the rôle of the inspector. In the old days he regarded himself mainly as a critic of the school's work-his tendency in practice was to expose weaknesses, to find the teacher out. The individual examination system made this attitude on his part almost inevitable, because it was so devised

that a teacher might secure good results for his pupils, not by intelligent instruction, but by learning how to hoodwink the inspector by concealment and subterfuge. That the inspector, on his part, should endeavour to defeat these manœuvres was not only natural, it was his duty; and the relations between the two parties were artificially strained over this elaborate game of hide-and-seek. Good inspectors no doubt remained superior to these evil influences, but they could not altogether escape the effects of a bad system. But now they were free to approach the teacher in a more genial frame of mind and to exchange a critical attitude for one of encouragement and construction. They were free to aim not merely at estimating a school's examination value for grant purposes but at counselling the staff to take due advantage of the greater freedom offered them. In conjunction with the more advanced among the teachers they became the pioneers of progress in the schools, carrying from school to school ideas and methods gathered-under the new conditions-from here and there; the ferment of thought and experiment that stirs the elementary schools to-day took its birth from this period.

The cessation of individual examinations too made it at last possible for inspectors to extend their survey of a school to its work and condition as a whole. They need no longer concentrate upon a uniform series of subject details, nor upon the preparation of elaborate schedules of results. They might now consider the value of a school as such, and what is more important-could vary their procedure as time and place required. Where for instance he had previously to distribute the time at his disposal upon examining in a succession of particular subjects, the inspector could now save time from testing the pupil's attainments for considering such matters as the time-tables, the games and physical exercises, the use made of pictures or apparatus, the bearing of school work on home life, and other questions arising in connection with the instruction or the school life generally. In these circumstances inspecting officers could widen and vary the range of their inquiries, and in so doing could find scope for their own special aptitudes, and put more of themselves into their work. Add to this that education was becoming more and more philosophically and scientifically studied, and its relation with every side of human life investigated. It was indeed a dull topic no longer. The result was that the inspector who looked upon his work as drudgery and sought relief and relaxation in his leisure hours was gradually exchanged for a type of inquirer who found his main interest in his ordinary day's work.

It was becoming easier too to get into sympathetic personal contact with the school staff. Not only was the teacher a more educated and a more interesting and more interested personality than heretofore, but there was far more time and opportunity for conversation. The social gulf between the inspector and the teacher was narrowing. The inspector who delivered his views 'ex cathedra' was becoming rare; instead, teacher and inspector began to take counsel together on their common concern.

This change of attitude did not come all at once: the revolution is not complete even to-day,—but it was first made possible in the twelve years preceding the Education Act of 1902.

The movement towards a more general type of inspection is illustrated in the change in the kind of reports written. the early nineties it was still customary to write elaborate reports upon each school, dealing with each school subject in succession, particularising on the state of instruction in each class and frequently upon individual teachers. This type of report was primarily critical and indicated the level of instruction in this or that subject—whether satisfactory or otherwise -rather than the intelligence or suitability of the methods employed in teaching or the means by which they could be bettered. The annual reports compiled by divisional inspectors were something similar in nature; they consisted mainly of a succession of extracts from the reports of district inspectors, and would go into a good deal of detail on the instruction in elementary, class, and specific subjects, giving what would now seem undue prominence to trivial points in the instruction; but they attempted little summary impression of the state of education as a whole. By the end of the century however perspective is being corrected; less attention is being paid to particulars under each subject of the curriculum, and other branches of a school's life come in for more notice.

The Board of Education recognised the changed conditions in its instructions to inspectors of the year 1899 and 1900, in which it cautions inspectors not to particularise in their reports upon school work except for the purpose of noting special excellences or defects and to avoid making personal remarks upon teachers. 'Your annual report should consist of a short description of the general character of the school as regards instruction, organisation, discipline, premises and apparatus.'

Since 1900 the rapid development of education succeeding the passage of the Education Act of 1902 has led to a corresponding differentiation and expansion in the inspectorate.

As in previous periods, changes in the inspecting hierarchy have corresponded with changes in the regulations regarding school curricula. But meantime there has been a rapid growth in publicly provided secondary and technical and continuation schools of various kinds; and separate inspectorates have been created to deal with both these branches of public education. It is not however my intention to deal with their history or place in the general inspection system, except to indicate their relation to the work of inspection in elementary schools (see Chapter on Co-ordination). I have however included a short chapter on secondary school inspection as also interesting in itself. A history of the secondary school inspectorate is given in the Board of Education's report for 1914-15.

5. The Elementary School inspectorate after 1900.

The seven years from 1895 'marks the end' says the Board's report for 1910-11 ' of the system in force since 1862, by which the choice of subjects in the curriculum of the school had been controlled mainly by monetary considerations. Within reasonable limits managers and teachers were now free to choose what they should teach and how they should teach it, without regard to the probable effect of their choice upon examination results and the financial stability of the schools.' At present the ordinary subjects of an elementary school curriculum comprise the English language, handwriting, arithmetic, drawing, observation lessons and nature study, geography, history, singing, hygiene physical training, and for girls domestic subjects. This however does not represent an invariable rule—there is freedom to omit, to add, or to vary within reasonable limits to suit local circumstances; and in addition to these subjects grants are given for work in cookery, laundry, housewifery, dairy work, handicraft and gardening. There is also complete freedom in selection of syllabus, provided the syllabus has the inspector's approval. And the Board has concerned itself, not to prescribe the details of each course (as in the days of uniform examination) but to put before the school authorities the best that is so far ascertainable as to the matter and method of the instruction in each subject, for local guidance and adaptation. This change in attitude towards the school curriculum affected the demands made upon the inspectorate in two ways. First it required a far deeper knowledge of educational aims and values, and a greater ability to consider each school in relation to its environment than had been the case hitherto; and, secondly, when much was left to local initiative and experiment, personal co-ordination in principle and practice amongst the inspectors became the more necessary, if the unity of elementary education was to be maintained, or economy of effort secured.

Steps have consequently been taken from time to time to improve the organisation of the elementary school inspectorate and to secure a better professional preparation in the personnel.

The time required:-

- (1) As perfect an organisation as possible (in the literal sense) of the inspecting hierarchy;
- (2) As perfect an acquaintance as possible, on the part of the inspector individually, with the principles of education and the methods of instruction and school management.

The beginning of the twentieth century has witnessed steps taken in both of these directions.

The Senior chief inspector, as he was called when he was first distinguished from his confrères in 1891, became the Chief Iuspector of elementary schools in 1902, and the previously named chief inspectors became inspectors of divisions. This change in nomcnetature signified an actual development in duties. The chief inspector was no longer 'primus interpares' but occupied a separate position 'in general control over the whole inspectorate and as a channel of communication between the inspectorate and the Board.'

The divisional inspectors, in their turn, each responsible for a definite geographical area, were expected 'to supervise in a more specific and effective manner than hitherto the work of all district inspectors; and their districts for which they were personally responsible were reduced in size. The divisional inspector is in future expected to keep himself acquainted with the work of the inspecting staff in his area. and to hold periodical conferences, reporting to the Board through the Chief Inspector any administrative changes he may think advisable. The Chief Inspector in his turn is

expected to keep in touch with the actual work being done in each division, visiting his divisional inspectors and holding conferences of them as a body; being thus prepared to make recommendations to the Board whose administration is to bo guided by the advice of the inspecting staff as a body.' The practice of holding local conferences of their subordinate staff has generally been also adopted by district inspectors, so that the inspecting staff now possesses a machinery for communication of ideas and experience in all directions. This subject will be expanded in a later chapter on Co-ordination. Steps have also been taken to improve the qualifications of inspecting officers. From 1882 onwards appointments of His Majesty's Inspectors were supposed to be made on grounds of special qualifications or experience, and more care has been taken in recent years to see that inspectors are specially equipped and trained before they assume independent charge. The old sub-inspector class (men promoted from the class of inspector's assistants) is pronounced an anachronism by 1901, 'a hindrance in the new system of inspection.'

From that date vacancies in the class of sub-inspector were filled by the newly created junior inspector, appointed like the full inspector from University graduates of good attainments. It was intended of course to promote the junior inspector to a full inspectorship after a time, but at the same time a course of probation and preparation was stipulated before he was to undertake the duties of an inspector independently. Within recent years a class of assistant inspectors has again been introduced, appointments being made of headmasters or assistants in elementary schools, and no recent appointments to junior inspectorships have been made. But it has to be remembered that an experienced elementary school teacher to-day has not only himself received a higher grade of general education in the training college or university than was possible twenty years ago, but throughout his career as teacher has taught under a new set of circumstances—a freedom and a responsibility through which if he takes the opportunity he can continue his general education and obtain an efficient training in the management of a school. The chapter on Training and Qualifications treats this topic in more detail.

The influences exerted upon the inspectorate by the administrative changes made by the Education Act of 1902 and the great development of public education in various directions of recent years are incidentally treated in some of the

chapters that follow. It must suffice here to indicate briefly the nature of the administrative change effected and the expansion in the constitution of the inspectorate as it stands to-day.

For the thirty years preceding 1902 elementary schools had been managed either by voluntary bodies, of one or other religious denomination, or by specially constituted school boards. Excepting in big city areas the latter were small bodies locally elected for individual schools, and had powers limited to local school management. They were indeed usually unprogressive and even obstructive, actuated by personal rather than public motives, and incapable of a broad view of their subject. This system might serve so long as the curriculum was fixed and the instruction standardised by an external examination. But with the newer freedom and latitude of local education the small school board passed out of date. extension of self-government had seen the creation of larger units of local administration, county and borough and urban and rural councils. In 1902 the control of public education was handed over to these bodies, who appointed Education Committees for the purpose in their respective areas, and received a large measure of freedom in determining and meeting the local educational requirements. It became the business of the local education authority—as the council was called -- 'to consider the supervision and provision of the different grades of education in their relation to one another. . . . within the given area.' Many of the larger of these authorities have since appointed educational inspecting officess of their own. The difficulties which beset a dual system of inspection, and the influence which it has exerted upon the Board's inspecting work, are noticed in the Chapter on Co-ordination below.

The Act of 1902 has, further, encouraged a wide variety of cducational expansion. In the England of to-day different types of publicly provided school have become sufficiently specialised to require corresponding differentiation in the inspectorate. Institutions under inspection fall roughly into five classes:—

- 1. Elementary schools.
- 2. Secondary schools and Pupil Teacher centres.
- 3. Training institutions.
- 4. Technical, Evening, and Continuation schools.
- 5. Schools of art.

There is a Chief Inspector for all England for each of groups 1, 2, 4, and 5, and a divisional elementary inspector

acts as staff or organising head for group 3. Elementary and technical schools are grouped in nine and three divisions respectively, under divisional inspectors with some eighty-two and thirty His Majesty's inspectors of districts. The elementary district inspectors are assisted by over 150 subordinate officers (sub-inspectors or junior or assistant inspectors). secondary school inspection there are twenty territorial inspectors, immediately subordinate to the Chief Inspector at headquarters. Five of the nine elementary school divisional inspectors and their women inspectors are immediately responsible for the inspection of training colleges. There are six inspectors for schools of art. And several officers are either separately appointed for special subjects or inspect them in addition to other duties. Such subjects comprise: handicraft, rural subjects and gardening, domestic subjects, science, mathematics, history and economics, drawing, mining, engineering, boot and shoe making, printing and bookbinding, navigation, textile subjects, boys' clubs, girls' clubs, and commerce.

The Medical Department is a development within the last decade, which inspects physical exercises in schools, certain special schools for blind or deaf or mentally defective children, and supervises the working of the systems of medical school inspection which have recently sprung up under local bodies all over the country. The relation which obtains between some of these different inspecting branches are considered in the Chapter on Co-ordination.

CHAPTER II.

Qualifications and Training for School Inspection.

Applicants for the post of His Majesty's inspector are expected to be able to show evidence of some special interest or experience in their subject. 'In the selection of candidates,' runs the Board of Education's statement on the subject, 'regard will be had to character, general ability, educational qualifications (both academical and professional), experience in teaching or in the organization or inspection of schools, and to any other evidence of fitness for the office of inspector. Appointments will occasionally be made with reference to special qualifications for some one subject of instruction, but as a rule the officers so appointed will be expected to be able to do the general work of an inspector, and will not be chosen with a view to their exclusive employment in the inspection of any one subject.'

Though the ordinary man is still apt to associate with the name inspector the possession of a gentlemanly manner and a good university degree, in point of fact the number of inspectors now at work in England who beside their inspecting experience can quote nothing but a good general education must be very small. It is to be noticed that at the present day appointments to the post of full inspector are made preferably of candidates between thirty and forty-five years of age; and this alone argues a considerable experience in work of some kind connected with education before appointment. The in-'spectors in charge of districts, indeed, vary in their special previous educational experience quite considerably. appointed in or before the end of the early nineteen hundreds, were young men, well under thirty, with only a year or two's experience of teaching-often in one of the English 'public' schools-when they were appointed, and one or two of the older officers were men, who in addition to a high university degree, qualified themselves for their future profession by working for one or two years as elementary teachers first. But His Majesty's inspectors of to-day include in their ranks several previous elementary school headmasters, men who have worked as principals or teachers in Council secondary schools, or as professors in training or other colleges, and graduates of the

newer universities who have taken up special lines. Several inspectors have had practical experience in both school and college work, or in both elementary and secondary schools, and there are some who happily combine high academic qualifications gained at the older universities with an inside working experience of elementary schools. Two of the nine divisional inspectors are of this class, one of whom, for example, taught for years in an elementary school, took for two years the headship of a training college in the East, and filled in turn the posts of sub-inspector, district and divisional inspector in England. academic qualifications include a good degree at ford. Very roughly however the three grades of officer which differentiate the present inspectorate, correspond with previous training or experience of three distinct types. These grades are the inspector (*His Majesty's inspector, to be strictly accurate—a term including district and divisional inspector), the assistant inspector, and the sub-inspector. The class of inspector (including a few junior inspectors, a special class in existence between 1902 and 1908, most of whom have since gained full inspectorships) implies the preliminary qualifications of a good Oxford or Cambridge degree, and some experience in teaching, commonly in an English public school. The sub-inspector class (like the junior inspector class no longer recruited for) implies, as a rule, experience as an assistant or head teacher in an elementary school before the present century, and therefore, generally a course of training in an elementary training college. The sub-inspectors to-day are almost all elderly men who have been engaged in elementary school inspection for many years.

The class of assistant inspectors is one recently created, and consists of men around middle age, chosen chiefly from head teachers, or experienced assistants in elementary schools.

In their respective contributions to efficiency in inspection, a comparison is possible between the two extreme types of previous training and experience. An officer who has grown up in the elementary school atmosphere, whose experience of teaching well precedes the present century, and of inspecting runs some way into double figures, though without a liberal formal education, is often distinguished for certain definite inspecting capabilities.

These include for instance a ready acquaintance with the standard of attainment and to some extent of ability, that may

^{*} The order of appointment is still signed by the King.

be expected in pupils of different ages, and power to test these attainments quickly and to the point. There is often a variety of ingenious devices in the tests employed, gathered from long and tried experience and an intimacy with the workings of a school pupil's mind. Intelligence as it works within the limits of a fixed course is pretty accurately gauged, and a number of defects in method, as recognised in a certain type of training manual, are readily discovered by tests especially devised to reveal them. There is little deceiving an inspector who, along certain lines, knows his elementary schools inside He is indeed noticeably intimate with the elementary class of school pupil, and is in touch with their home circumstances and their manner of thinking and acting. He can therefore adapt his questioning not only to their intelligence but also-which is more important-to their interests. arithmetic is practical, not only as it deals with bread and butter, pins and needles, or pots and pans, but with these items in a child's life as they occur and are treated in the street or shop or house that the child knows. For this reason, and through length of years in so doing, he is adept in the handling of a class. He knows how to place his questions, not only how to frame them, and how to detect and stir the weaker pupils. He is quick to seize the attention of the class, and can take it on from the teacher with confidence, though he may be no longer skilled in developing an oral lesson for its benefit.

His inspection is often characterised too by a rapidity of test and an economy of management which secures an aggregate of results in the shortest time. There is no sauntering or superfluous talking with the teacher; the inspection is as a rule almost austerely to the point. It has usually a definiteness of procedure that makes it easy to describe.

In a typical case, for instance, of a middle sized urban school, the inspector starts his day with one department, setting each class written tests in arithmetic or composition. He is careful to see that the questions are clearly understood. This done from room to room, he returns on his tracks to check the starting arrangements of the teacher. By the time this is over the class in the room he took first is ready for its oral examination, in reading, say, or history or geography, and the room to room itinerary is repeated with the oral work. In this way each class is tested in at least two subjects. Papers are then collected, and part are marked by the feacher, both to save the inspector's time and to acquaint him with the standard expected of the class; and in each class the whole

body of papers is collected, and handed over to the inspector, neatly arranged, for his further scrutiny at home. On the morrow he returns early to the school and during the Scripture period goes over with the headmaster such points as his scrutiny of the papers has suggested. The infant department, as it involves less paper work, is dealt with last. Here is inspection with a regular and definite method.

The contribution to the inspector's practical qualifications that is given by a good general education at public school and college and some experience of teaching in a public school, is of a different nature. An officer of this type has been trained in the power of abstract thinking, and in the consideration of topics from several points of view. His mental horizon is broadened,—he has learnt to view a subject in the big, and to recognise its relation to the several sides of the larger life around it. He starts less in touch with hard fact, more interested in ideas and enthusiastic for ideals, though unacquainted with the daily and detailed obstacles to their realisa-Being less conversant with the elementary school classroom than the school teacher, he may be neither so adept in handling a class nor so confident and homely in his manner. He may not be a good oral questioner, and he will certainly be less expeditious in obtaining his results; and they may be less definite when he has obtained them. On the other hand, if his weapons are less clear cut, they are more flexible and adaptable. If he sees less clearly it may be because he looks for so much more. If his attention is dispersed it is because there are so many more objects that attract it. If his method is less easily summarised, it is because it is too variable and elastic to include under any general formula; and it is variable because he comes to a school not with a preconceived plan of attack suitable to schools of every type, or even to schools of every type within one grade, or kind of locality, but because he is sensitive to the differences and peculiarities of each school as he sees it, and would follow in each case the plan of action that suits the circumstances. He may be inferior in classroom readiness, in variety and ingenuity of tests, in the rapid use of a handy instrument, but he is the less ready in using an instrument because there are more instruments that he is ready to use. He focusses the less, as a rule, on the work or attainments of the pupil, more upon the aims and methods of the teacher. He is less severely and intensely inspecting the school; he may question the pupils, or set some written work -but usually here and there only; he will stop and talk with

teacher and headmaster; discover their ideas about their work, any innovations made or contemplated; he may spend much time in apparent sauntering without seeking for palpable results. The pupils' records, and written exercise books, will come in for notice here, and their attitude to the teacher or their subject in an oral lesson next door, or the care which they show or the intelligence or resourcefulness which questioning reveals, in their practical occupations. He may take special note of the topics set for composition, of the way in which the pupils prepare for their written work, or of their readiness in expressing themselves orally upon work done. But what he is trying to do in all this various and sometimes leisurely procedure, is not so much to probe the pupil's attainments and intelligence in this and that subject, or to serve up to himself an aggregate result for the class or the school, with measures of deficiency in this or excellence in that subject, as to find out what the pupils are gaining from a broader educational standpoint, in power, for example, to deal intelligently and keenly (that is, usefully) with the ordinary demands of their everyday life. What good is this school doing to its pupils? Does it really contribute to their welfare as present or future members of society? What is its influence upon them in heart as in head? Is it giving them interests that are worthwhile or the means of pursuing these interests professionally? is it doing this, with an eye on the economic and social milieu into which most of them will have to fit? It is questions of this kind that his university training sets stirring in the mind of the inspector as he visits his school, and his plan of inspection is framed accordingly. If he saunters—it is with a method.

Inspectors themselves vary in their estimates of the ideal equipment for an inspector's work. To the question whether actual experience in teaching in elementary schools should not be a qualification demanded in all ordinary cases, answers differ. There is the view that you need not be a painter to be able to appreciate a picture, nor a practical teacher to appraise a school. The analogy may perhaps hold true if appraisement means a judgment of the picture or the school against ideals—a recognition, that is, of the picture's claims to beauty or the school's claims as a perfect place of education. But in practice the appraisement of a school involves more than this, it involves an appreciation of the efforts made to obtain perfection, and the progressive nature of those efforts—the inspector has to measure the struggle, not only the attainment. And

just as in regard to a picture the care needed for its production can be measured best by the man who can most nearly place himself in the position of the painter at his work, so to give due credit for a school's work, it is necessary to assume the position of the worker; and though this can be partially done by patient inquiry into particulars, it is clear that the surest way of understanding the detailed complexities of the teaching life is to live it. It must indeed require an exceptional gift of imagination to appropriate the emotional attitude of a teacher to his environment, without having oneself taught in similar For the purpose of inspection an officer who circumstances. approaches a school without this experience is the less certain of his ground in making his appraisement—to teach in an elementary school is to find out how much can be reasonably expected of another in the same situation, and thus to be able to make due allowance for the difficulties of advance. inspector with this experience can thus not only estimate the school's worth the more justly, but can distinguish with more certainty between the practicable and the impracticable, and be the more useful in his advice. On the other hand, a liberal general education—such as for example a course in Literae Humaniores with the social life of Oxford-should, and does, in most cases train its student in a varied consideration of questions before him, and thus to an intellectual assumption of several points of view. One effect of a wide intellectual education is the capacity to think oneself into other people's circumstances and this brings with it the habit of making allowances even for difficulties beyond one's own experience. Where, without the actual experience itself, it is apt to fail is in the power of gauging those difficulties precisely, and thus of adjusting the judgment to the case.

Of the two qualifications for an inspector, an experience as a teacher and headmaster in the type of school inspected, and a good school and university education, there can be no doubt as to which, in ordinary cases, is the more valuable. Education alone can lead to a full appreciation of its own ideals, and alone can train to intellectual sympathy, and an officer who starts with breadth of view, a trained imagination and power of accurate and many sided thought, needs only time and experience in his vocation to distinguish between the visionary and the practical. On the other hand, no amount of teaching in itself will equip a teacher for judging circumstances different from his own. Unless—through formal education or otherwise—he has also acquired the habits of wider thought,

he is apt to understand, in fresh circumstances, only what is already familiar, and to make no allowance for the unknown. One test of a good education is the measure of one's power to understand the unfamiliar.

The difference in standpoint between teacher and inspector necessarily sometimes results in one-sided criticism. Thus complaints made by teachers or headmasters of the impracticability and idealism of inspectors' recommendations may be only a natural weapon of self-exoneration. An inspector may expect too much—a teacher may also try too little. In point of fact, inspectors seem seldom to advance important suggestions except in consultation with the head teacher or after enlisting his co-operation, unless in cases of obviously misconducted schools. There are instances where sound advice is discredited if it comes from officers who have not taught in elementary schools themselves, and the fact that a teacher has more confidence in the advice of an officer who has been through the mill, is to that extent an advantage to an officer who has so qualified.

There is also a good deal that could be said in favour of some acquaintance with the training of teachers as a qualification for inspection, and it is doubtful if an actual course in a training college, as student or lecturer, is not even more valuable as a preliminary qualification than a course of teaching in schools, especially in imparting familiarity with a variety of methods in teaching, with the principles of school organisation, and with future teachers in their college stage.

In default of any systematic organisation for producing school inspectors ready made, however, the practical question is not one of enumerating ideal qualifications, or combinations of qualifications, for the profession, but of the actual discovery of the best man and of giving such supplementary training as may seem necessary after appointment. In practice men who often possess the ideal combination of a good university degree and a sufficient practical experience in elementary school or elementary training college work are none too common, and the working solution of the Board of Education in the past has been to recognise this fact by distributing the duties of inspector amongst officers of two distinct types. The detailed inspection of individual schools is largely left either to the subinspectors, or to the new class of assistant inspectors, in charge as a rule of sub-divisions of districts; while the districinspector, usually an officer of considerable university attainments, represents the Board of Education for his district as a

whole. The assistant inspector has his eye rather on the class room and the school, the inspector on the school and the area; the assistant is invaluable in the detail of school inspection, particularly in assessing the work of teachers and classes, and the upkeep of registers and the routine of organisation; the inspector's business is rather to consider the school in its relation to its outer environment and the general requirements of the district, and to view it in its place in the educational system as a whole. He directs the strategy for the district, his assistant deals with tactics in the school. This differentiation in standpoint must only be taken as roughly and generally true, for district inspectors are free to distribute the district work as they will, while they are expected formally to visit every school in their area at least once in three years.

For the profession of school inspection however paper and technical qualification are certainly of no more importance than personal character. Education is the making of humanity; and in no profession—except that of statesman or clergyman—is the material treated and the machinery for treating it less inaterial and less mechanical. A teacher is not, like an engineer, for instance, concerned with producing or working engines, or with schemes of traction and motion, nor even like the doctor primarily with the care of bodies; his main business is to develop mind and character; and in this process technical knowledge comes second and his own personality first. A school inspector, in one aspect, is a teacher on a wider scale; he should have a 'sense' for rightly treating children of every kind.

But besides this he is an educationist in a still wider capacity; and as the success with which he works here depends peculiarly upon his personal qualifications and character, the part which he is expected to play in promoting the interests of public education in England requires understanding.

The Act of 1902 placed the provision of public education mainly in the hands of the existing local councils of various kinds for local self-government: it added—as the Act of 1870 had not completely done—education to the list of matters in which the people, as represented by their local bodies, should now govern themselves. The democratic ideal can only be realised as the people are enabled and assisted to train themselves for the efficient execution of the tasks which they successively undertake. And it is the business of the central government—and in this case of the Board of Education—to

watch and safeguard this progressive preparation. In this process of 'educating our masters' a middle course has to be steered between two extremes. On the one hand an excess of prescription or even of advice hinders the growth of the sense of responsibility and of the power to exercise it. Capacity for self-government can come only with practice; and thus for future efficiency as educationists local authorities must exercise a due measure of authority from the start. On the other hand this process involves the permission to local bodies to learn from experience, and experience includes the making, and amending, of blunders; and the question in practice is of the extent of the sacrifice of present efficiency consistent with the interests of the future. There is a point at which mistakes may ultimately do more harm than good: a bad blunder may not be worth its lesson, and some authorities may profit from experience more readily than others. It is here that the Board's inspector has the delicate task of deciding in every case first when and where he should attempt to give a lead, and when it is wiser to withhold his personality and to suffer what he feels to be the worse rather than to advise the immediately better. It would of course be bad statesmanship to withdraw from active counsel altogether; after all it is by the spreading of new views, and of communicating the desire for fresh measures, as well as by the teachings of experience, that the public is schooled to be capable of ever more difficult duties. But the imposition of advice from without, unless it is intelligently appropriated, brings either opposition or blind acquiescence and misconstruction, and may thus fail both in its immediate object and in its less direct but more important one of educating the public to higher things. The policy of the Board's inspector then is neither one of uncalculated reticence nor of preaching new faiths in and out of season. question which he has to put himself at each opportunity for reform and progress is whether he can secure for it a willing as well as intelligent acquiescence. If so, and if (a second proviso) the measure or principle of action is right, then his contribution to public education in this wide sense has been made. A great deal of an inspector's thought and energy is directed, not to the inspection of schools, but to the quiet unobstrusive dissemination of new ideas. He is a sort of missionary of public progress. Over the luncheon table-and inspectors in big towns sometimes make a point of accommodating their luncheon place to that of members of local authoritics or others-at casual meetings in train or street,

or at more formal conferences or discussions, he can seize or create the opportunity of suggesting new points of view, removing common misunderstandings, cultivating friendly relations, and generally of preparing the path of educational progress. Thus he needs in particular the power of getting into touch with diverse personalities, and not only, perhaps not so much, of logically persuading them, as of getting them to desire and to will the new. In the ideal he has to initiate initiative; and in the actual, at any rate, he must be able to communicate interest and understanding without giving offence. Results have often to be left to time to work out.

In dealing with local authorities or boards of management, who are not as a rule educational experts, the capacity is especially valuable of stating positions or proposing solutions of problems in simple untechnical language understanded of the people. To the 'practical' man the jargon of educational theory and the appeal to philosophical principle are alike suspect: the power must be present or acquired of detecting the kind of argument that will tell, and of disguising all abstract philosophy in homely clothing. To attempt to ram ultimate reasons down plain people's throats is worse than useless. For these reasons it will be understood that there is no place in the English inspectorate for the fanatic or the sheer idealist, and special intellectual brilliance would often go wasted. Far more serviceable personal qualities are a general high level of intelligence, an equable temper, a sociable manner, a steady enthusiasm, and plenty of industry and commonsense.

In the view of the Board of Education in particular His Majesty's inspector is an inquirer and investigator first, and secondarily a missionary of educational creeds. His prime function in his area is to discover the facts of the case, to render to the Board and to the authority a true account of all the educational circumstances. It is not ordinarily his concern to attempt to alter the facts unless he is called upon to do so, but he must be ready, when invited, to place his knowledge and his opinion at the local authority's disposal. He is thus in a real sense a servant of the public. On the other hand it would clearly be a mistake for a district inspector to restrain his enthusiasm completely: a keen officer cannot remain at grips with besetting problems without attempting their solution or suffering from a thwarted and a wasted personality if he is too much checked in doing so. And there are inspectors of long experience who hold that the result of a policy of withholding a central lead in education is not that the localities proceed to lead themselves but that no advance occurs at all. Perhaps the trend is on the whole in the direction of the local bodies seeking the help of the Board's inspector more than formerly, and trusting rather less to the advice of officers appointed by themselves, who are usually less highly qualified than the Board's inspectors, less widely experienced, and in the nature of the case able to offer their employers a less disinterested advice. If the event proves to be an increasing reliance upon outside expert help, or an increasing capacity for dispensing with it, the policy of considered non-intervention will be justified.

However that may be, from the account that has been given it will be clear how important in English inspectors is the pessession of particular traits of personal character. For this reason the selection of inspecting officers must always be made by nomination and interview, not simply by examination, nor on the score of technical qualifications and testimonials. This is the case, of course, both in England and in India, where appointments are also not confirmed till two years' probation has further tested the suitability of the officer for his work.

In addition to this the practice in England at present is to give a newly appointed officer a more or less formal training in his work. The actual process of training appear; to vary. In a typical case the officer is attached to some senior inspector for the purpose. He accompanies him in his visits to schools, and has an opportunity of watching his procedure, the reasons for which are explained to him where necessary. He is then given a share in the work himself, where his senior officer can mark or correct any obvious defects, in general or particularunnecessary interference with the teaching, the pitching of his questions above the level of the class, insufficient attention to backward pupils, and so on. More particularly he learns with this guidance any views of the Board as to policy in general—the extent to which a direct lead should be given in the conduct of schools, the points at which it is prudent to apply pressure, and the methods by which local authorities can best be approached. He is entrusted with a certain amount of report writing, possibly with a special investigation, say of the main building requirements in a group of schools, and his reports are discussed and criticised. Meantime he is in frequent touch with other inspectors in his area, and can form impressions of their procedure and methods, and,

when his superior officer thinks fit, he becomes entrusted with independent inspections of his own. No change marks the close of the period of training; the newly appointed officer gradually assumes increasing responsibilities, the successive stages towards which vary in duration according to his capacity to undertake them. The officer in charge of this training sends reports of his progress to his chief inspector at head-quarters with intimation of the special capacities in which he is most fitted to do well.

If in England a newly appointed inspector has a period of definite trial and training under a senior inspector, it seems clear that a special preparation for his work is even more needed for European officers appointed to serve in India, where an officer fresh from home is a stranger not only to the schools which he has to inspect, but also to the customs, and particularly to the colloquial language, of the people.

The language is not to be learnt by incidental preparation, in time spared from the routine of work for the passing of a departmental examination. Whether the first appointment be to a responsible position in a training college, or to the work of school inspection, the question may be ventured whether the first year of service in India spent with an executive district officer, or a missionary, or an English or Indian official touring in Indian villages, with the object of learning firstly, to converse with all and sundry, and secondly, all that it is possible to learn in the period of the customs and ways of Indian rural life, would not repay again and again the time assigned to it. How many European inspectors are now able easily to converse without an interpreter with teachers in village schools, or with the people of the village?

In addition to this, a temporary attachment to an experienced inspector for a few months before undertaking independent administration can save a young officer a good many blunders in his dealings with schools, with local bodies and managements, with other Government officers and departments, and in the control and conduct of an office.

CHAPTER III.

Inspecting Procedure in Elementary Schools.

In the period covered by the examination and payment-forresults system the immediate subject of inspection was the pupil, as grouped for the standard examination. The inspector was engaged in estimating individual results. -if the term be allowed-was accordingly so organised as to cover the examination of the pupils in each of the three elementary subjects in the least time. The inspecting officer brought with him printed arithmetic test cards which were rapidly distributed to one lot of pupils, and worked by them whilst he heard another set in mechanical reading aloud. The same procedure was observed in the matter of writing and dictation, and the practical question was one of so arranging the oral and written tests as to keep all the pupils busy all the time, without letting any group exceed the limit of time proper to the test in question. The inspecting officer was provided with a schedule of all the examinees, and entered marks against their names for their reading as he heard it, and for their dictation and arithmetic as rapidly as they could be assessed on This was not difficult, as the tests were so framed as the spot. to facilitate a mechanical evaluation—the sums were either right or wrong, and the totting of spelling mistakes in dictation and a rough assessment of the handwriting was the work of a moment. As might be expected, the sub-inspector of those days became rapidly efficient in framing for schools of every size inspection time-tables for expediting the examinations without a hitch.

Very different was the procedure encouraged in the early nineteen hundreds. The pendulum swung from one extreme to the other. The examination of results gave way to the inspection of methods. The teacher was now the immediate focus of the inspector's attention rather than the pupil; and the teacher, no longer the slave of a routine, but free to pick and choose amongst subjects and curricula, and to teach the class in the way he thought best. There was a period indeed in which the inspector was definitely instructed to abstain from interrupting the class or teacher at work; he was to hold as it were a watching brief for the Government, and to base his judgment of the school upon the impression thus gathered of its

ordinary work. This policy of masterly inactivity threatened unfortunate results. So far as official instructions were obeyed it encouraged slackness in an inspector and plausibility in a teacher. One way of gauging the worth of a school-its discipline, and spirit, and methods of teaching, may be to observe that school as it is ordinarily carried on. To interrupt the work is no doubt to disturb the very process you are observ-But this argument overlooks the presence of the inspector-however inconspicuous he may make himself. The mere consciousness of his presence introduces a new atmosphere. He is in the nature of the case the last person who can see a school as it ordinarily goes on. The question which he has to answer. is not whether he shall disturb the school work, but what kind of disturbance will best serve his purpose. If his purpose be appraisement, mere non-interruption is likely to defeat it. teacher whose work is being adjudged simply by what another sees him at the time doing, takes care, if he is sensible, to show himself at his most impressive. He is anxious to display his powers of teaching, and those—of course—are most obviously displayed, and in a form which the onlooker can judge most quickly, in the oral lesson. The adroit teacher consequently turns on his pet subjects-and sometimes a specially reserved (or even rehearsed) lesson—for the inspector's edification, while his less sophisticated colleague resorts to oral revision of past work.

To raise non-interference to a principle is also to limit the range of the inspection to what may be going on at the time; but a due appraisement demands an investigation of essentials, not just of the happenings of the moment.

Whatever be their causal relation, the fashions of observational inspection and of mainly oral teaching came in together. The period of examination of the pupils was followed by a reaction. In the pupil ability now became the important thing, not mere acquisition, to be gained by the exercise of thought not of memory. Everything turned upon the processes employed in awakening intelligence and training ability. Hence the efficiency of a school was to be gauged by a study of the teacher teaching, not of the pupil learning. The process of teaching was for the time identified with the process of conducting an oral lesson. Clearly the teacher is not teaching when the pupil is working his arithmetic and the teacher is sitting at his desk. Hence the fashion of the oral lesson and with it the inspecting method—as a means of appraising the tuition in a school—of watching the teacher at work.

The logical application of this principle revolutionises the inspection procedure. Instead of rearranging the whole school. for examination, distributing tasks to each standard, and superintending operations with the aid of the staff, the inspector will be found seated inconspicuously in classroom corners, whilethe teacher-supposed to be doing his ordinary work-deliversan oral lesson to the class. After a time the inspector rises. makes his way to another room, where he finds another lesson. in progress, and so continues his perambulation gathering what impressions he may. This type of inspection procedure, it will be noticed, is almost diametrically opposed to the first. But neither of these programmes, of course, was regularly carried out 'in toto.' The examination was in point of fact tempered by some inquiry, on the part of the inspector, as to the teaching procedure, and there was oral investigation of subjects other than the three R's. And inspection of the second type probably never occurred unmodified by at least some discussion with the teacher or even a little questioning of the class. But the inspection practice had shifted from one pole towards the other by the early years of the present century.

With the cessation before 1905 of instructions to inspecters as to procedure, inspectors are now largely free to follow their own lines in inspecting; methods yary with individual aptitude or preference, and generalisation is less safe and more difficult. A point of importance as affecting procedure is the freedom now accorded to inspectors to pay visits when and where they will. The fixed annual formal inspection is a thing of the past. It is thus open to an officer to vary his procedure with the circumstances of the case. Most district inspectors in normal times attempt some more or less thorough inspection of each elementary school in their areas once every three or four years. At this inspection an endeavour is made to gain a fair estimate of the school's worth at the time, and to point out the directions in which it may make progress. In a typical case the district inspector has one or two assistants with him and the work is distributed according to their individual aptitudes. Investigation of registers—the more mechanical part of the work—is as a rule left to an assistant, while the inspector talks over with the headmaster his time-table and schemes of work, or any changes in staff, building or other arrangements effected or desired.

In this and in the conduct of his inspection throughout he has to guide him a file of notes upon the school, accumulated

since his last inspection, as well as any inspection report actually published. It has been explained elsewhere that it is not the practice of inspectors to write periodical reports upon schools except so far as they are necessary for the special purpose of informing authorities of the school's progress or for assisting the headmaster and teachers in their work. spector however when he visits the school naturally wishes to be informed of its state and progress in more detail than in given in an occasional report. The practice consequently obtains of writing notes for private record at each visit, kept in a single file in charge usually of the assistant inspector in whose area the school lies, to whom accordingly notes made by any other colleague are sent. Any inspecting officer visiting the school can thus obtain, and have the benefit of, this school file before the day of his visit. The Board of Education issues a special form for the notes in question.

At his general inspection, accordingly, the inspector will be guided by his knowledge of the school obtained from his own recollections and the written comments of colleagues, and the completeness and character of his inspection are thus determined. It is very rare that an attempt is made to measure the teaching of the school in every class and every subject. may be undertaken in the case of a specially inefficient school, where the inspector wishes to make quite certain of his ground before issuing an unfavourable report. More usually he will share the work with his assistants on the principle of apportioning to them, amongst the subjects which he wishes to investigate, those in which they are most proficient. It is common to arrange that each teacher's work will be seen by more than one inspecting officer. This double object is effected by one inspector, for example, by distributing the inspection work classwise in the morning and subjectwise in the afternoon; an arrangement which, where it is practicable, has the additional advantage of enabling an inspector to consider the relations of other subjects to that with which he is specially charged.

The work apportioned, the actual classroom procedure, the actual method, that is to say, which the inspecting officer adopts for measuring the instruction in any case, varies—as has been mentioned—with the individual. It is however fairly safe to say that the inspector of to-day seldom confines his attention either to testing the pupil's attainments or to investigating the teacher's methods. It is a rule to set some written work to be done by the pupils, more particularly in

arithmetic and composition, and perhaps it is fair to say that the sub-inspector of old days—the man who grew up with the examination system and was appointed to inspecting work before examinations ceased—has a bent for devising ingenious and often penetrating tests of a pupil's conversance with the rules of arithmetic and for a wholesome insistence upon thoroughness and accuracy in written work generally.

The investigation of a teacher's aims and methods, useful as it may be in helping to an estimate of the school's workespecially of the intelligence that is shown in combining the development of a common school spirit and policy with freedom of action in the individual teacher and in choice, and adaptation to circumstances, of curricula and syllabuses and lessons,—and in getting to know the individual teacher, claims to-day very tactful handling. It is important to maintain and even strengthen the teacher's sense of responsibility for his own teaching, and thus to avoid at all costs injuring his self-respect. A teacher is accordingly expected to have consciously determined his ideals and procedure, and to have substantial reasons for his choice. The inspector therefore commonly adopts the attitude not so much of critic as of learner-he wishes to discover what the teaching is all about; though of course a sensible teacher on his side will also naturally be anxious to avail himself of the inspector's wider experience in suggesting further improvements or fresh ideas. Hence the inquiry into method usually takes the form of joint discussion, rather than of considered criticism, or, if criticism is offered, it is in the guise of suggestion supplied by the way, or, say, of the description of some plan or device found successful elsewhere, and in which the teacher would be naturally interested. The assumption is that teacher and inspector are equally concerned to co-operate in furthering a common cause. Another point which the inspector has to consider is the effect of his procedure upon the general discipline of the school. The greater freedom amongst children, the cult of individuality, in home and school life, has been accompanied by some loss of respect and consideration In the West, as also in the East, the teacher once claimed a peculiar deference and respect as an embodiment of learning. This peculiar spirit of reverence has been lost in the West, and is, alas, a dying tradition in the East also. close personal relation, often of affection, that used to subsist between teacher and pupil has been unable to withstand a general system of large classes and publicly paid and trained teachers. The inspector—the servant of the State—has to be careful to do nothing by word or deed to accentuate a bad tendency; rather in the classroom he must do what he can to restore prestige and esteem to the teacher's position. Any obvious criticism of a teacher before the class would defeat this object; but it is possible by manner and tone and by giving to the class its due of responsibility for its own attainments, to support the teacher and strengthen the discipline of the school. The attitude of inspectors, as a whole, certainly expresses consciousness of the need of care and tact in this respect.

Many inspectors at the present time lay a good deal of emphasis upon written tests in subjects other than the three R's especially in history and geography. The internal examinations conducted by head teachers have hitherto been mainly restricted to the elementary subjects, in continuation of the traditions handed down from the days of formal examinations by the inspector. The ordinary instruction in history and geography is also largely oral, often by means of reading books, so that they are apt to escape written test altogether. Hence there is good reason for extending the written examinations at the inspection to those subjects, both to encourage attention to them generally and as an example to the teacher. For measures or devices employed by an inspector at his inspection often have more direct influence upon the teaching than hints or suggestions verbally given.

The written work given at inspections of this character is seldom assessed by the inspector on the spot. The preliminary marking is as a rule left to the teacher, but it is the custom of inspectors to take much written work home, where they can not only check the standard of the working, but as far as time admits analyse the papers for prevalent merits and defects. There is no doubt that the careful analysis of written work can be made a valuable means of appraising the tuition. Besides enabling the examiner to apply a common measure to the pupil's attainments, a written paper can reveal not only defects or merits in the pupil, but some characteristics of the teaching. A study of compositions can show how far a pupil has been taught to think, properly set papers in geography and history can discover special methods employed in teaching these subjects, the more so if the teacher be allowed to set one or two of the questions himself. A good deal of 'examination' of papers of this kind is now undertaken by inspectors, though the extent to which analysis can be carried naturally varies with the time at disposal.

The question arises whether the inspection does not usually include an investigation of the question and the answer papers of the ordinary internal examinations conducted by the staff. Question papers are an invaluable index of the ideals and intelligence of the teacher in regard to his subject, and those and the written answers show the standards aimed at and reached, and faithfully reflect the character of the teaching. It is obvious however that to serve the object adequately, the circumstances of the examination must be clearly known and defined; and as yet, for reasons given in the chapter on this subject, this valuable aid to inspection is not generally included in the inspector's repertoire. He prefers to conduct informal examinations of his own.

In addition to the testing of pupils the more detailed inspection includes some separate inquiry into the processes and aims of the instruction. Noticeably little regard is paid as a rule to the minor technique of teaching. Simultaneous answering and the 'forest of hands' are discouraged; but there are many details which generally escape overt remark; such, for instance, as the position of the teacher when engaged in an oral lesson, the proper presentation and due distribution of questions, the seating of individual pupils with regard to size, sight, and hearing, the condition and use of the blackboard, the position of the pupil writing on it (he often stands between the blackboard and the class) the proper holding of books when reading; or the correct posture of pupils when seated or writing at their There are of course reasons for this. Many of the technical details in question are exhibited most conspicuously in the oral class lesson, and as this has of late been giving way to quiet desk study, occasions are fewer when the minutiæ of formal instruction come in for notice. Apart from this, the proportion amongst inspectors of trained teachers is not very high, and the inspector with a public school and university education is attracted more by the broader problems of his work than by the detailed technique of teaching. In areas where the local authority employs its own inspectors, the Board's inspec-. tors also generally feel that the details of inspection should be left to the local body, and that the Board's officers are more usefully occupied in taking a wider survey of education in their area than in repeating what is being done by others. is more frequent therefore to find inspecting officers discussing the wider questions of curriculum, modifications in the subjects or syllabuses adapted to the circumstances, especially the social or economic circumstances, of the school than to hear

comments passed upon the smaller items in a teacher's paraphernalia. Methods of teaching particular subjects get their share of attention, but as a rule—if my experience is sufficient to justify an induction—they are dealt with incidentally, as some special merit or defect is revealed from an examination of the pupils or their records, rather than as a subject an inquiry into which is justified as a regular separate item in an inspection.

There is perhaps something to be said for a plan of inspection (whatever the subject) which begins with a teacher's ideas, or his practice in presenting his subject, and then goes on to study its effects upon the pupils. Such a procedure has at any rate the merit of anticipating the inspector's own preconceptions of how the subject in question should be handled, and would disarm the criticism-passed often by headmastersthat their pupils are frequently tested by methods which imply a type of teaching to which they have not been accustomed. An inspector for instance who sets a test in composition by writing the opening sentences of a succession of paragraphs. which the pupils are then to complete, may be unfairly disappointed with the work of a class in which another practice in composition—equally effectual—has been the rule. An unfamiliar treatment of a class is no doubt justifiable as an experiment (though experiments are as a rule best left to the teachers themselves) or as an illustration of a new device or principle that seems to deserve trial. It is indeed one of an inspector's functions to make suggestions of this kind. mistake occurs when he combines in one and the same exercise a test of the pupil's capacities and an illustration of a fresh idea.

In setting written work it is common for inspecting officers who are aware of the tendency to test a class by unfamiliar methods, to allow the teacher to set some questions himself, and in oral testing to let the teacher open the subject and to continue the questioning along his lines; or, again, the written tests before being given are submitted to the teacher for possible objection. The nature of the objections raised is often in itself an indication of the teacher's own estimate of the powers or adaptability of his class.

It will be gathered from what has been said, that modern inspection in elementary schools preserves a mean between the extreme methods of testing the pupils' attainments and of watching the teachers at work. Certainly in the more detailed inspections, when an estimate of a school's condition and pro-

gress is desired, the balance of attention goes to the pupils, on the results of whose written work and oral answering not only can their positive attainments be measured, but a great deal can be discovered as to the success of the teaching in awakening intelligence, quickness, and resource, and something incidentally as to methods of teaching employed. Written tests are regarded as an essential element in inspections of this kind, for by them only can you be certain of including in your judgment the weaker as well as the average and stronger sections in a Impressions gained from oral questioning are often quite misleading, especially so in the remoter country schools, where the pupils are unused to newcomers, and to the quick play of life in busy towns. Rural children, who appear less sharp than town children, and answer oral questions slowly and with effort, often reveal in their written work deeper and steadier powers of thought. The question in practice is as tothe extent to which the written testing should go; how written answers are best treated and the amount of written work in any case that is necessary for a fair estimate. In some casesa couple of questions in arithmetic, and a page of composition, has to suffice; in one district it is usual to give five questions in an arithmetic test, and written tests sometimes extend beyond the two R's. But as a rule the two questions which the written tests set out to answer of a pupil are 'What can he do in his mathematics?' and 'How can he express his thoughts?' The compositions may of course themselves incidentally test his standard in other subjects. Drawings are also sometimes done. For 'practical' subjects in the upper classes-gardening, for instance, and handwork—the inspector usually relies. upon the manner in which the pupils set to work, upon the answers to questions upon their practice or its principles or the nature or extent of their independent observations or experiments, upon records and samples of work done, and upon the active interest shown.

In this connection it is convenient to make a distinction between the more detailed inspection of the district inspecting staff and the visits casually paid by the individual inspecting officer. At visits of the latter type more attention is generally paid to the school in its ordinary working. There is less formal testing, less written work specially given, more simple observation; and conversation with the teachers is less severely to the point. No rule of procedure can of course be formulated, for this naturally varies with the special object in view. As a rule the effects of any recommendation made at the last inspec-

tion are especially noticed, and points that arise incidentally are talked over; a more or less formal test may be held of certain subjects or classes, as the results of the last iuspection or the inspector's general knowledge of the school's requirements suggest. These informal visits however often present a favourable opportunity for evaluating the more practical side of the school's activities; half an hour with a group of pupils in the garden at the right season cau give a very fair idea of their practical acquaintance with gardening, and an expert can learn a good deal from watching the handling of the workshop tools, and questioning a pupil on the objects and method of his work. Such informal visits at any rate serve to correct and complete impressions gained at more formal inspections, and to result in a fairer and more confidently written report.

But if in particular they reduce the risk, that attends the single incomplete inspection, of overlooking important features or peculiarities in a school's work, and so of a one-sided appraisement; yet in point of fact where a series of partial inspections aims more at continuity—at following up previous lines of inquiry or checking past impressions—than at comprehensiveness, it is quite possible for some serious matters to remain concealed for years together.

A detailed inspection, the object of which is to form a fair estimate of the condition of the school as a whole, seldom takes less than a day even in a small country school. Iuspectors whom I have questioued on the subject agree roughly in their estimates of the time required for inspections with this object. A school of one hundred pupils or less can scarcely be evaluated by two inspectors in less than a day of four or five hours. A school of five or six hundred may take three men as mauy as three days. Four or five officers might require the inside of a week for a school of one thousand pupils and three departments.

Where the time for inspection has to be curtailed, the reduction, in ordinary cases, is made otherwise than with the top classes, for in English schools, where the bulk of the pupils are constant, it is the older pupils that best exhibit the summary influences of the school's work throughout.

This estimate does not assume an investigation into every subject in every class, but is sufficient for a discovery of the main strength and weakness in a school, and a more thorough inquiry into any subjects or branches of the school life that in the course of inspection are found to require it. Every

member of the staff and every class of pupil will have received enough attention to give a fair measure of their general progress, though it is always possible that some minor development or deficiency or feature of the school's life may escape notice. The spirit and character—the inner life—of the school are gathered incidentally by unconscious absorption of its atmosphere as much as by deliberate observation of particular traits or of the machinery of discipline, or—as it may be putof the extent to which the spirit of discipline replaces its machinery. The general organisation of the school-the system of classification, of distribution of work amongst the staff, the arrangement of the time-table, and perhaps the syllabuses -may form an item in the inspecting programme for separate discussion with the head teacher or members of the staff. It should be possible to gain a fairly just idea of the working of this organisation within the time given, but final conclusions are often only possible after a series of visits extending over some period. But the single inspection can at least reveal any marked excellence or error in organisation. It is important to note that inspectors do not as a body trust either to single visits or the opinions of single officers when forming their official estimate of a school. The continuity of inspection work is indeed a feature of the system. One visit prepares the way for another, and the impressions gathered at one inspection help to determine the procedure at the next. Very frequently a line of inquiry is opened up at one visit; it often happens that an officer leaves a school doubtful as to its welfare in certain aspects-he suspects the practical work of overshadowing the intellectual subjects, or he is doubtful of the extent to which the pupils are trained in independent observation, or he is impressed with something unusual in the attitude of the pupils towards their teachers and their work, and wishes to obtain a deeper insight into the secret of its success. The English inspector is rightly cautions of committing himself to writing until he is sure of his facts, and the report that he submits to the Board of Education is practically of an inspection conducted by two or three officers, and at different intervals.

N.B.—A characteristic of English elementary school inspection, which reduces the labour if not the time involved is the inspector's relief from the business of filling or scrutinizing forms. He may call for elaborate statistics if he needs them, but as a rule an entry made on the spot of the school numbers, accommodation, and staff, occupying him five to ten minutes, is found to serve the purposes of his visit. There is room, on the back of the form in use, for such general observations or notes on separate subjects as he may care to enter afterwards. And the registers which he or his assistant may examine are usually the ordinary current records of the school; there is no elaborate preparation of special schedules against his visit.

Special measures are also taken to facilitate continuity of policy where an inspector leaves one district for another. At this time he hands over to his successor full papers on each school, together with a statement giving a general estimate of the condition of his area as a whole, with particular emphasis upon its past achievement and its existing deficiencies.

Apart from securing greater justice of estimate, however, continuity in inspection is indispensable for the due progress of the school. A series of independent inspections following a uniform routine in procedure with little regard to the comments passed at previous inspections or the ground covered by other inspectors, besides wasting an inspector's time, leaves the school without satisfactory guidance. Continuity of inspection means—or at least encourages—continuity of policy within the school; one inspector can follow up the work of another, and the progress of the school can be watched along given lines. This need not mean that other aspects of the work will be disregarded. Independent inspections, which aim at covering the school's work in every item, too often result in ignoring the influence of past recommendations, while adding fresh ones in matters not previously noticed. The head teacher pays the less heed to suggestions which he thinks will not be followed up, or for special attention to which he may receive no special credit; when the winds blow variously he cannot tell how to set his sail. The policy of comprehensive inspection. with even emphasis upon every subject or school pursuit, is one deliberately avoided in English elementary school inspection. Where inspection of this kind affects the school's progress, it must tend to result in an evenness and uniformity of character that makes no allowance for special lines of development. policy of the English inspectorate on the other hand is definitely to encourage individuality in schools, and to promote to watch and in some measure to control the development of special lines of activity or the imparting of a special character or bent to the work as a whole. Experiment within reason is fostered; dullness and uniformity are even discountenanced. A divisional inspector has actually said that he would mistrust a school which aimed at an even level of excellence all along The inspection that seeks for special characteristics is calculated to foster individuality in schools; the inspection that attempts to attend to everything tends rather to maintain uniformity. A careful policy of continuity in inspections of the first type will result in preserving the special character in a school; while inspections of the second type-if they are also

discontinuous—stimulate at best a number of spasmodic outgrowths that never mature.

Some English inspectors occasionally follow their detailed inspections with staff meetings. The practice however is not general, and opinions as to the usefulness of these meetings vary. There is the view for instance that all that has to be said of general school concern can be said to the head teacher as he accompanies the inspector in the school, or in private conversation, while there is no point in holding a staff meeting for the various comments that concern particular members of the staff; they are indeed better communicated in the circumstances that suggest them on the spot. An inspector here and there however makes a special point of meeting the staff as a body, on the ground that the teachers have a better opportunity than is afforded in the classroom of presenting their position in any matter of importance, when they have also had time to consider in its practical bearings any advice that has been offered, while a staff meeting can often give a headmaster who requires it the inspector's explicit support. Such meetings however are probably an invariable rule nowhere; in some districts they are pretty generally held, in others they are resorted to only when exceptional reasons seem to require them.

The value of the staff meeting cannot indeed be considered in the abstract. It may vary for instance with the characteristics of the staffs. In a busy town area, for example, except as an integral part of an inspection, an occasional meeting of head teachers or specially interested assistants for an educational chat may be more practicable and successful than a more general or formal conference. It varies again with the aptitude of the individual inspector for using this instrument in his work. And individual inspectors' verdicts on their value also vary accordingly.

CHAPTER IV.

Co-ordination.

1. Introductory.

The term co-ordination may here serve to cover a number of specific means for securing economy of effort through co-operation amongst the Board's inspecting staff, or between inspecting officers and outside educational agents.

Agreement as to the general principles of policy and as to the treatment or solution of practical problems as they arise, and the communication of fresh ideas or experiments—the measures taken to obtain these objects, firstly between different officers within a given branch of the inspectorate, secondly between different branches of cducational officers or agencies, form the common topic of most of the following chapter. Incidentally, and more especially in the concluding sections, reference is made to certain portion of the educational field where the activities of different branches of the inspectorate overlap or fail to meet.

To consider first the subject of co-ordination within the elementary branch of the inspectorate.

The pivot of the inspecting system in elementary education is the district inspector in his district as being the immediately responsible representative of the Board of Education in one of the eighty odd areas into which England is divided. Though free within wide limits to arrange the work of district inspection as he thinks fit and to suit his arrangements and his methods, and to some extent his aims, in inspection to his individual tastes or convictions, it remains true that the great body of inspectors are—perhaps largely unconsciously—animated by a common spirit, a common conception of their special responsibilities, and to a great extent a community of emphasis upon certain special lines of advance in schools.

This is not due to any rigidity in the structure of the inspectorate nor in the methods of subdividing the work. The structure of the inspectorate is in no way rigid: inspectors no longer depend upon formal instructions from Whitehall prescribing procedure in schools, or the organisation of district inspection, or the special policies to be followed, or points to which attention must be paid. And at the same time subject

to a formal ostensibly triennial 'Treasury' visit to each school, the inspector is free both in arranging his programme and it promoting the interest of education on lines of his own.

In the absence of rigid prescription the reason lies partly in the existence of common national ideals but especially in a variety of measures deliberately adopted by different inspectors to promote unity of action within their areas. One method for instance by which opinions and impressions and experience are conveyed up and down the inspecting hierarchy is that of conference more or less formal. Plans are arranged in every district for bringing the inspecting staff into touch with one another. The schemes vary in detail. In a typical rural district the inspector in charge assigns to each of three assistants separate areas, to which in the main they keep throughout the year. He himself visits each area either alone or in company of the area inspecting officer, and also holds conferences of his inspecting staff once or perhaps more often in the year. Besides these opportunities of discussing points of common interest, or of consulting the district inspector as occasions arise, more or less intermittent opportunities occur for cooperative inspection of schools, which give different officers a glimpse of, if not an insight into, one another's methods. one rural district, for example, with a large seaport town, the assistants so arrange programmes as to admit of joint inspection of certain large urban schools, reserved from the area of one of them for the purpose.

In rural areas, especially wide districts with numbers of small rural schools, the assistant inspecting staff have, however, as a rule, fewer chances of contact than elsewhere, though an inspector can always create, whether by formal conference or otherwise, opportunities for social meetings or exchange of views amongst the staff. In urban districts the distribution of work is sometimes other than territorial, and may be deliberately changed from time to time. Separate officers may be responsible for particular groups of schools, chosen perhaps according to type or grade, or the same schools may be visited by several officers from different points of view. In a system which is free and elastic it is easy to consider special personal: qualifications or preferences in arranging the work, so long as the head of the district is careful to keep familiar with the district as a whole. In any case the proximity of schools in town areas to one another makes frequent meeting of inspecting officers natural; they often have a common luncheon place,

and can thus compare notes informally. And in such areas joint inspection is the more frequent, both because the schools are larger and demand it and because less travelling is entailed. Informal meetings are then supplemented by more formal discussions as points arise which seem to need more deliberate treatment.

In one district (a number of boroughs scattered over the country district of another inspector) communication is so short and easy as to admit of a weekly meeting at headquarters and of joint inspections being conducted in different parts of the district on two days in every week.

As with the district, so-broadly speaking-with the divi-The divisional inspector over his area follows a somewhat similar plan of conferences and district touring. Besides being the senior officer for one of the nine divisions in England, he is as a rule assigned a small district of his own; he is in fact a district inspector with special responsibilities over a number of other districts. When divisions were first created in England the divisional officer was expected to help in standardising the annual examinations, but had in practice little actual authority over his district colleagues. Latterly however his authority has been made more substantial. Appointments and promotions of officers in his area are subject to his recommendation, and yearly increments in salary to his check. He is becoming a regular channel of communication on matters of importance between district officials and headquarters; reports submitted from districts pass through his hands. arranges for the effective training of newly appointed officers. It is his business to keep in touch with local authorities. Consequently his influence in co-ordinating the work throughout his division has increased. Besides his district work, for which a full inspector may be attached to him as assistant, he tours through his division, viewing the inspection work of each district inspector for a month or so in the year, and getting into touch with that of the district inspector's assistants. schools with his district colleague, and thus can communicate or exchange views on particular schools on the spot, while incidentally influencing the district policy or procedure. direction of policy so far as it goes is informal, and often perhaps hardly deliberate; the divisional inspector will scarcely go bévond advice; he is consulted, rather than gives orders. Nor does he interfere with the arrangements made between the district inspector and his assistants; but he has to be acquainted with the assistants and their manner of work and to form an

opinion of their capabilities. While in this way in the course of his peregrinations he can spread his influence over the division as a whole, and can carry experience and expedients from one part of it to another, he also holds an annual conference of officers on subjects that arise during the year. The exact composition of such a conference may vary—it may be a meeting of inspectors from other branches besides the elementary. conference in the north-west division, for example, held in 1914 included twelve elementary, three secondary, and five technical inspectors. The divisional meetings may thus serve to co-ordinate work not only amongst the officers of one branch but between the different branches. The agenda of this conference will indicate certain points in which co-ordination between these different branches was required. It included these topics:—

- (1) The needs of each local area in regard to elementary, secondary, and technical education.
- (2) The training of teachers;
 - (a) Student teachers;
 - (b) The connection of His Majesty's inspectors with training colleges;
 - (c) The training of teachers in evening schools.
- (3) The inspection of evening schools by inspectors of other branches.

A little later another conference was held of inspectors on the elementary side, attended by the Board of Education's Assistant Secretary for education, by the Chief Inspector for elementary schools, by eleven district inspectors, five women inspectors, and four subordinate officers, the inspector for the division presiding. This composition facilitates the direct expression of opinions from the bottom to the top of the inspecting hierarchy, and enables the chief inspector or the permanent official to present the Board's views or policy to officers of every grade direct or to gather information directly from them.

Besides the district and divisional meetings there is also an annual meeting of divisional inspectors and the chief inspector at Whitehall, which completes the scale of formal interchanges of view, and thus brings together data or opinions on problems culled from the whole of England. And the chief inspector for elementary education makes regular tours in the provinces, thus keeping himself directly in touch with local conditions and needs.

It must not be gathered from what has been said that this system of formal meetings is rigidly adhered to or is the only kind of conference held. The conference method of comparing experience is adapted to circumstances, and is not necessarily of inspectors only. Meetings have in some areas been arranged between the Board's and the 'local' inspecting staffs, to arrive for example at some agreement as to distribution of inspection work, or a meeting may be arranged of inspecting officers and teachers, when the machinery of the national union of teachers is sometimes utilised for the purpose. Some inspectors believe in conferences, others do not, and apart from the district and divisional conferences mentioned no rule can be laid down.

Besides occasional meetings at divisional conferences district inspectors sometimes visit one another's areas. This may be done rarely by set arrangement for the purpose of comparing local conditions or procedure, usually by invitation of a district inspector who wishes assistance in some branch of his work in which his neighbour is the better qualified. Few inspecting officers are without some special subject or aspect of their work in which they were proficient either before appointment or have specially interested themselves afterwards. Thus a district inspector who is not satisfied with the state of the science work in some large school may ask assistance from a scientific neighbour, or if school gardens have been lately started in his county may ask a more proficient colleague to see one or two schools with him and assist him with advice. For special subjects, however, there are specialist inspectors appointed for large areas to whom it would usually be the obvious course to apply, and probably a more common case in which a colleague is called in from a neighbouring district is that of the inspection of an inefficient school in which the district inspector wishes to correct or verify his opinion from outside. no regular scheme by which district inspectors see one another's work.

The same comment is true of course of divisional inspectors (who most nearly correspond to English district inspectors) in India. Here no doubt as in England, inspectors in different areas of the same province come into occasional contact chiefly at conferences at headquarters, and sometimes consult one another in writing upon petty points of procedure not regulated by the department or upon the merits of applicants for appointments. Inspectors in different provinces however, seldom meet, and possibly an arrangement by which an inspector from

one province could be temporarily associated with his fellow in another, would result in a useful comparison of experience and practice, with economy in the solution of problems common to both.

. Another means of harmonizing policy is through the formulation and communication of special points of inquiry on the part of the district inspector for his subordinate staff. This plan varies from rather vague indications of what may be worth more attention in each area, made orally at some informal meeting, to a detailed programme of points for guidance under headings issued in the form of a circular. In this way an attack may be made upon school time-tables in one year, upon internal examinations in another, or upon the type of work and the means of classification proper to infant schools in a third; so that, in addition to the regular routine of inspection, attention is focussed successively on particular branches of inspecting work, and general principles in regard to these can then be evolved. The pursuit of special lines of inquiry is—as has been mentioned—generally encouraged, and in one division the divisional inspector commonly circulates through his area for comments the special subject report submitted him, and then repeats its circulation with the comments attached. And it is the practice in every division to circulate an annual selection of reports of all kinds written in the division, that each inspecting officer may note the points to which his fellows are attending and their manner of treating them as gathered from the reports.

Lastly, an important means of acquainting officers in one division with what is being done in other parts of England, and in suggesting lines of inquiry or advance common to the whole country, lies in the frequent issue by the Board of Education of reports and pamphlets on educational subjects. Apart from the papers for general publication—to which reference may be made to the chapter on Reports—the Board occasionally issues privately to its officers reports upon important topics treated by inspectors in special areas. An instance of these are the reports upon internal examinations, of which two have been issued, based upon separate inquiries in the north-west and the metropolitan division; and a report upon classification and organisation in schools recently prepared in the north-west division.

The measures of co-ordination enumerated above relate more especially to the elementary branch of the Board's inspectors.

The secondary school inspectorate has a smaller personnel and a simpler structure. The need for a formal system of conferences is the less, as the 'group' or full inspection which is the characteristic form of secondary school inspection, draws together inspectors from some distance and the meetings held at particular schools raise, in their particular application, problems common to the whole country. It is also usual to locate in neighbouring areas men with different special proficiencies, and it is not uncommon for an inspector to invite his neighbour's advice upon syllabuses or other questions relating to his special subject. On the other hand topics dealt with incidentally and in their bearing on single institutions might often gain by separate treatment on their own merits, and the group' inspections avoid calling upon men from widely distant areas. General formal conferences of the secondary school inspectorate do not however form an integral part of its working organisation.

As women inspectors are incorporated in the general system and participate in the inspection of elementary schools, mention of them should not be omitted here. Women inspectors exist for every type and grade of education, but the majority are employed either as general inspectors of elementary (and five of secondary) schools, or as inspectors of domestic subjects. In the former capacity they are attached, as His Majesty's Inspectors, to districts, and work in co-operation with, and under the general guidance of, the district inspector, though they are responsible for their own inspection programmes. Their field of work includes infant departments, girls' schools, and mixed schools, but this does not exclude male inspection from these, and a woman inspector may accompany a man inspector to a boys' school. No woman holds full charge of a district; she usually works independently over her area, but does some of her work in common with the male staff; and shares in the meetings or other measures of district and divisional co-ordination.

A number of women inspectors also work separately over large areas for the inspection of centres and classes for elementary school children in domestic subjects, and as such are less closely in touch with the district inspecting staffs or organisation. But as the 'domestic subjects' become more customary in ordinary schools, it is possible that this distinction in the women inspectorate may gradually lapse. There are also women inspectors of training colleges, of technical schools, and of physical exercises in general schools. The whole body

of women inspectors is grouped under a Chief Woman Inspector, and holds a divisional conference under her presidency with the Chief Inspector of elementary schools present. And in this way the women inspectorate forms a cross division on a basis of sex through the different branches of the male inspectorate based on subject or type of school; and thus serves in each branch to concentrate attention on educational subjects of feminine interest. An example of a women inspectors' conference is given in the chapter on Special Movements (p. 123). The conditions of appointment, training, and probation are essentially the same for women inspectors as for His Majesty's inspectors generally, but they are on a lower scale of pay.

2. Relation between the Elementary and the Secondary branch.

The remarks passed above deal mainly with the means of promoting unity of aim and action between officers within a given branch of the inspectorate. But where the chief breaks in the inspecting system occur is not within the different branches of the inspectorate but between one branch and another. English education has naturally reached a stage of greater specialization than is the case so far in India, and the process of differentiation, unless carefully guarded, easily results in separate, almost watertight, compartments. An ideal educational fabric preserves continuity of policy and arrangement both between each stage of education and between the different types of education at each stage; there is no crossing and no gap-a pupil can reach the highest grade of formal education without breaks or duplications, and can prepare for any vocation with exact economy of time and effort. But though English education has—especially since the Act of 1902 -been full of life and energy, the structure is loosely knit.

It would thus seem an advantage for the Government supervision to be so organised as to bear upon the connections in the structure, as much as upon the individual parts. But the logic of history has tended rather in the latter direction. Inspectors, equally with schools, specialize. Owing largely to the overweight of elementary education at the bottom of the scale, it has not yet seemed practicable to unite the different branches of education under single inspection, and the inspectorate is divided into elementary, secondary, technical and medical branches, all separately staffed. The question therefore of the

opportunities and arrangements for co-operation between officers in the separate branches is a serious one.

It would seem unfortunate therefore that meetings between elementary and secondary school inspectors are incidental and occasional. The attention of each officer is naturally centred upon his own grade of school, and an elementary inspector usually invites the company of his secondary colleague, or vice versā, chiefly when he needs help for inspecting some school in his area. In this way, it is common for elementary inspectors, especially if they have special subjects, to give help in the full inspections of secondary schools. It is in the nature of the case less usual for secondary school inspectors to visit elementary schools, though nothing prevents an elementary inspector inviting assistance should he need it.

In either case however the point of importance is that the mind centres, not upon the connection between the two grades of education or upon the problems arising therefrom, but upon the particular concerns of separate schools. This distinction is not to be pressed too far, for questions of the relation between the two grades of education naturally arise at such meetings, but there is no regular machinery for their full consideration.

The problem is partly one of time. Officers charged with different branches of education naturally attend mainly to their respective branches, and are sparing of time or opportunities for considering the ground that lies between themmore sparing indeed that a true economy of time suggests. The occasional divisional conferences at which inspectors from different branches meet do not go far enough; they are too intermittent and general in character. There is not enough cooperation over questions that arise here and there at the time that they are warm in the mind—the co-ordination of syllabuses in an elementary and secondary school, or the reconciliation of difference in methods of teaching for the sake of prospective secondary pupils; the amount and kind of out-of-school work for pupils; the arrangement of examination courses; the comparative order of urgency in which the provision of new buildings for either grade should be pressed upon the local authority: the association that might subsist between the school staffs and so on.

Disassociation between the different branches of the Board's inspectorate in the same area is naturally a hindrance in relations with local authorities. That much however can be done even under the existing system, to promote unity of action and policy where officers in different branches make a deli-

berate point of combination, was shown indeed a few years ago in the case of what has become known as 'the Cheshire Pact,' when in the North Western Division, officers of the elementary, secondary, and technological branches systematically conferred on all projects of common interest, to the advantage in influence and value of the work done in each branch.

The elementary school inspectors might also profit from a closer and more regular association with work in the training colleges which prepare teachers for the schools which they The actual inspection of these colleges is as a matter of fact directly entrusted to certain of the divisional elementary school inspectors, and to some women inspectors in the case of women's institutions, with power to invite help of others from the different branches of the inspecting staff. Some of the elementary inspectors thus see a little of training college work, but their assistance is mainly confined to visiting practising schools and appraising the teaching of students under training, and they do not personally familiarize themselves with the ordinary life and routine of the college itself. Selected individuals amongst the inspecting staffs are also entrusted with the setting and marking of papers for the training college examinations, and with the preparation of a report upon the answer papers. Thus whereas a few senior inspectors can see the training college work in all its aspects, and a few others in certain aspects only either as assistants in inspection or as official examiners of written work, there is no regular association between the training college, the college authorities, or the students in training, and the elementary inspector as such; and an inspector may go indefinitely without seeing anything of this part of the teacher's career. The advantages to the inspector of such contact have been touched upon in the chapter on Training and Qualifications for inspection. besides them the 'to and fro 'criticism that would result from a constant comparison of the conditions in the school with the preparation in the college, and of the ideals of teaching and school management as expounded in the college and as practised in the schools, would be as useful to the college and to the school, as to the particular work of the inspector. If it is the temptation of the college to abide too austerely in ideals, to keep too sternly to the 'practical' is equally that of the school, a divorce that accounts for much failure in training institutions generally. In the abstract the inspector on a well considered system, might help substantially in tempering the idealism of the one as in elevating the practice of the other.

3. Specialist Inspection.

The employment of inspectors for special subjects also tends to upset the harmony of school work. As elsewhere mentioned, the Board has employed special inspectors for handicraft and drawing, and, more recently, for music and domestic subjects and to some extent for school gardening and specially rural subjects.

Until recently specialist inspectors were assigned large areas, and in practice arranged their programmes independently of the general inspectors, and visited the schools separately, except when programmes happened, or could easily be made, to fit. A specialist in some one school subject visiting a school alone is placed in a difficult position. He is naturally unable to view the curriculum in perspective; and in proportion to his enthusiasm places an undue importance upon the subject which he inspects. When a subject is being introduced for the first time, or a neglected subject needs special encouragement and guidance, especially if it is a subject unfamiliar to the general inspector, the specialist has his raison d'être. In the promotion of more intelligent methods of teaching drawing and hand work, specialists in these subjects have done yeoman's service in the past, and have made invaluable though not the sole-contributions to the changes in the conception of the place of drawing in education which regards it no longer as a special ornamental study, but as a means of expression available, with other means, for every subject, and which has expanded the matter and the manner of its exercise. from the conventional drawing of outline forms, to various kinds of mechanical and artistic portrayal of a variety of objects, 'natural' or conventional, and observed directly or remembered from previous observation. Similarly, there has been need for special guidance in the early days of school gardening and 'nature' study, and the impetus that has been given to practical and outdoor work in schools, the success which is attending it, and the growth of interest in it amongst inspectors generally must be partly credited to the specialist inspectors or supervisors in rural subjects whom the Board has sent itinerating the country for the purpose.

The present policy of the Board of Education, however, is rather to restrict the amount of specialist inspection as much as possible, as much, that is to say, as is consistent with the ensuring of sufficiently skilled advice and guidance in the subject. For in practice it is found that specialist inspection disturbs proportion in a school's work; the school is pulled in different directions at different times. An old headmaster cited a case in which, in the old 'inspection by examination' days, his school was first inspected by the sub-inspector, for whom all the class had been carefully drilled in the minimum required in the three R's; a fortnight later came the district inspector who heard such subjects as history and geography, and the pupils accordingly committed their reading books in these subjects to memory for the intervening fortnight, and after that they gave up literary pursuits, and took to drawing strokes and curves and unlifelike outline birds and fishes in anticipation of the drawing inspector who came three weeks afterwards. This of course is an extreme instance of the days of 'with notice' visits, but the later plan of specialist 'without notice' inspection also tended to vary the emphasis in schools according to the forcefulness of the comments passed by different inspectors on different sides of the work. A school thus sometimes acquired distinction through some special excellence unmerited by its state in other branches of its work. and it may be surmised that in such cases there was room for friction between the special and the general inspector. latter had some check in his control over the school syllabuses, which came to him for approval. But even here room is left for debate as to whether, for example, the drawing of 'natural' objects should be taken in the 'nature study' periods, and not be considered part of the drawing lessons proper, or whether the clay modelling of castles or igloos should not be relegated to history or geography, thus increasing the time in the handwork periods for more specific forms of handicraft. Besides disproportion in school work specialist inspection may encourage disconnection. The special subject is not viewed in its bearings upon the school's other activities. The effects of this tendency are observable to-day in the drawing and handwork of elementary schools. In many towns, for instance, mainly for reasons of economy, handicraft is taught at special centres, to which pupils from eleven years of age may be sent for manual instruction. Instances are not rare in which the instructors in these centres are quite out of touch with the schools from which the pupils come—there are no mutual staff visits, and the sole connecting link is the pupils themselves. A system of 'specialist' inspection has in effect confirmed this tendency to isolation, which a more general contact between these types of schools both on the part of teachers and of inspectors serves to break down. The result is too often seen in handwork that has no bearing upon the subjects in the pupils' curriculum, and in a certain jealousy in the school staff of the interest which the pupil takes in his work at the centre. The subjects compete instead of co-operating in the pupil's education. The pupils, again, reach the centre differently prepared, and needless unevenness in classes results. In one school the early training in paper folding, clay modelling or mechanical drawing and measuring, may prepare the pupil in general handiness and in habits of accurate drawing and measurement, for advanced work for which other pupils come unprepared. Mechanical drawing indeed has tended to lapse from the school curriculum, being left to be taken at the centre.

Towns exist in which the instructors of different manual training centres are out of touch not only with the elementary schools, but with one another. The courses of handwork are worked out in isolation, and it rests with the inspector to spread the good features of each among the lot.

Within recent years, however, changes in the organisation of the inspectorate have aimed at remedying this 'specialist' The policy of assigning specialists large areas over which they range attending to their special subjects is being given up, and the general and the special inspector are approaching one another from their opposite poles. The specialist inspector is encouraged to acquaint himself with the other sides of the school's work, and in some cases is actually taking a share in the work of general inspection. There are stages in this movement from his side. He may watch the teaching of other than his special subject in the schools which he visits; he may visit ordinary elementary schools which include no special handicraft in their programme; he may go on to share with the district inspector the inspection of elementary schools, taking either the practical side of the work or the classroom subjects as he finds himself qualified; lastly his area for special inspection may be contracted and he may be given a special share of independent general inspection. The general inspector, on his part, is now encouraged to interest himself in special subjects. and is often appointed partly on the score of some special proficiency. He then becomes a general school inspector who may be invited to advise on his particular line of study within a prescribed area extending beyond his own district. The double movement from both ends is thus in the direction of a 'generalist specialist' inspecting system, according to which special subjects of the school are judged in relation to the curriculum as a whole.

The present moment is one of transition. Specialist inspectors still itinerate on programmes practically independent of the general inspectors, without prearranging to meet. On the other hand, the general inspector may take an interest in the same special subject, and will enter on the specialist's ground. But if he visits a manual centre which the specialist also inspects, he comes chiefly as a visitor or for the purpose of acquainting himself with the work in its relation to the general work in the schools, and he leaves report writing to his colleague. The transition naturally takes time to reach its limit and it is possible that it will never be wise to dispense with specialist inspection altogether—in music, for example, and physical exercises.

Nor, perhaps, in other cases, will specialist and generalist ever be quite convertible—the pendulum might easily swing too far. A man with mental habits and preferences contracted and matured by long preoccupation with a narrow field of work may be unable to do justice to more general subjects in later life and be ill-fitted for the complexities of general administration. But this question awaits the answer of experience.

In India, where specialists are already being employed for certain subjects in some provinces (as science, handicraft, and drawing), the chief lessons from the English experience would seem to be that the specialist should keep in close contact with the general territorial inspector, working in association and often in company with him, and should consult with him in formulating his general recommendations; that he should also see something of the general work of the schools, and not confine his attention to his special subject, and in particular should investigate the connexions that do or might obtain between the special subject and others in the curriculum. An important function is that of advising the general inspector unfamiliar with the special subject, particularly in showing him how far, and in what points, he can promote the interests of the subject in question in schools not visited by the specialist himself.

4. 'Local' and Medical Inspection.

Another hindrance to the efficiency of Government inspection arises from the relations which obtain between the Board's and the local authority's inspectors. Even before the Educa-

tion Act of 1902 some of the largest boroughs in England employed school inspectors and educational officers of their own, and since the passage of that Act the number of local bodies sodoing has increased. The extent to which local bodies undertake inspection of their own schools varies widely with circumstances. The smaller authorities usually cannot afford the cost. of separate inspection, and here, and sometimes in big rural areas, the detailed inspection of the schools, and so the main outside influence upon their control and management, remains with the Board's officers. In large urban areas, on the other hand, namely, Manchester, Liverpool, and London, considerable 'local' staffs conduct regular inspections of their own, and the tendency of the Board's inspectorate is to occupy themselves with the broader problems of the locality or wider areas, and to leave detailed individual inspection to the 'local' officers. In some cases definite agreements have resulted in a distribution of work which avoids overlapping, but even here, and more especially where the 'spheres of influence' are indefinite or undivided, whatever the personal relations between the two inspectorates, official co-operation is irregular or rarebetween the two groups of educational officers. Local staffs: vary much from place to place in the quality of their personnel, and differences in training and previous experience, differences. between the local and the central standpoint, and differences natural between experts in so debatable a subject as education. continue to prevent unanimity between the two groups of officers. The local inspector is often chosen from amongst the local elementary school headmasters, and being besides in the employ of the local body, is necessarily affected by other than educational considerations in dealing with his schools. rule the local inspectorate is more immediately concerned with questions of appointments, promotions, supply, and administration generally than the Board's inspector, and the question arises whether the local authorities will end by assuming moreeducational as well as administrative control, or will come torely more upon the assistance of the Board. Alternative eventualities might be the undertaking of all particular inspection as well as administration by the locality, leaving to the Board's inspector the general check of standards in the district or the collection of general information and experience for the country as a whole, or else a contraction of the 'local' authority's activity to matters of supply and organisation under the advice, and dependent upon the detailed inspection results, of the Board's officers. The present stage is one of somewhat uncomfortable and partial adjustment of functions, often to the detriment of the inspector's work and influence. And apart from matters of general policy, in the school too the inspecting officer is hampered by the fact of disagreement, or by the feeling that it may occur, or by apparent differences in advice which has been misunderstood and is, therefore, misconstrued by the teachers. Where there is dual inspection, it is common for teachers to complain of discrepancies in estimate of, or recommendations regarding, their work, and whether their complaints are grounded or not, the effect upon the one inspecting officer is to keep him from expressing ideas or from making suggestions that might appear to conflict with possible views of the other. Where an inspector does not feel free to criticize or comment, or where the schools are in fact pulled different ways, the work of inspection misses its mark.

Similar drawbacks obtain with the medical side of the local authority's work. The last decade has witnessed a general development of medical inspection in elementary schools throughout England, and local bodies-whether counties or boroughs-employ their own medical staffs for the purpose. A large country area, for instance, may have two or three medical officers for general medical examination of pupils, and an oculist and one or more dental surgeons as well. The medical school inspector conducts his inspection on a regular programme, a copy of which goes to the Board's educational school inspector. This is done to prevent visits clashing; but though it is no doubt inconvenient to conduct educational and medical inspections on the same day, the result is that the two officers seldom meet, and common topics are rarely considered from the double point of view. The medical inspector hitherto has been mainly busied with the examination of the physique of individual children, and secondarily, with a sentiny of the premises from the standpoint of sanitation and hygiene. The educational inspector also considers the buildings, with less technical knowledge of medicine, but with more of an eye on the educational side of the question. He would consider a classroom, for instance, not merely in its general lighting and ventilation, but in regard to its lighting for a pupil who may have to sit in a far corner of it for periods in succession, and he would naturally attend to the form and size of the desks, and to the position and surfaces of the blackboard with regard to the light.

And there is much ground common to both inspectors that is not treated by them in common, but, if treated at

all, is approached from different angles. There is indeed a good deal to which an educational inspector might give more heed, if its importance were made clear to him by the medical man, and the medical inspector would stand to gain by realising the educational circumstances of the school. Questions of the arrangement of the time-table, of the place and duration of recesses, of the use made of the middle day interval, of the sequence of subjects, of the occupations of pupils in out-of-school hours, of their games and home study, of their physical exercises-in school and out, of their diet, clothing, and hours of sleep, are all very obvious common ground for medical and educational investigation; but the criticism may be ventured that these subjects are seldom considered in common, and some of them often escape attention from both parties. Where they come in for the medical man's attention, it is incidentally and partially, in reference to individual cases. The sufficiency of a pupil's clothing, for instance, and his general cleanliness will be noticed when the pupil is examined in detail; and if he is badly clothed, the matter will be officially remarked. But in point of fact the medical inspector does not see the pupils in their ordinary clothes at all, nor at their ordinary level of cleanliness, for they take good care to come neat and clean on the medical examination day; an educational inspector, visiting without notice can see these things more as they usually are and consider them in their relation to the life of the school as a whole. He could then usefully record his general or particular impressions for the medical inspector's assistance.

The doctor again may be led by a pupil's physical condition to inquire into his outside occupations, and may find him overworked in occupations out of school. He will note on this particular case for the parents' attention, but collaboration with the educational inspector might have shown the need of a more general inquiry into the relation of the outside employment to the work done in the school or of a temporary relaxation of school study in the special case.

In one instance the medical officer was struck by the inferiority in a large school of the girls' eyesight to that of the boys, and attributed it, on further investigation, to the kind of needlework done in school. This is a case where a knowledge of the school conditions assisted the medical man to arrive at his conclusions, but it is clear that many cases must arise in which the educational and the medical men could help one another in furthering what is, after all, their common object, by

suggesting lines of joint inquiry, supplying information useful to either officer, or suggesting points of importance which might otherwise be overlooked. In point of fact a good deal of the physical side of school work can easily escape the educational inspector's notice, such as the postures of pupils when seated for writing, or when standing for oral reading, or the relation of the hours of meals to the opening time of the school or the playing of games and other forms of vigorous exercise. The Swedish exercises again, are often—especially in rural schools—perfunctorily or wrongly done, and perhaps are saved from ill-effects by the very lack of conscious effort put into them.

The advantages of close co-operation between general and medical inspector are of course as clear for India as for any other country. A general inspector who can give up a day or two to watching his medical colleague at work, can not only add to the means within his knowledge by which he can assist in promoting attention to physical development in schools, but, by his more intimate and wider knowledge of school conditions generally, can join with the medical inspector in diagnosing and possibly in remedying or ameliorating the more general causes of common or of particular defects.

The Board of Education maintains a small medical department of its own, of eight medical officers and a nurse inspector; some of these and a few others chiefly from the general inspectorate inspect physical exercises in all grades of schools and colleges; but are too few to be responsible generally for the inspection throughout. Physical training courses for the general inspectors have been held in the past, but there seems to beneed of more informed supervision of the physical training in schools which do not possess special instructors, and of morethorough co-operation for the purpose between the general and medical inspectorate. Besides the supervision of the local authorities' systems of medical school inspection with a view to grant, the inspection of schools for the mentally defective and for the blind and the deaf is also in the hands of the Board's medical inspectors, except for certain day schools seen by the district elementary school inspectors on their behalf. The general inspector does not however, report separately uponthe schools which he visits, and his recommendations carry theless weight. Schools, whether for defective or normal pupils, are primarily educational institutions, and visits to several of them by a stranger produce the impression that their educational possibilities might be more completely realised if educational and medical experts could collaborate more regularly upon the many problems which their present condition scems to present.

Visits to institutions for the blind and the deaf here and there in the country leave the mind beset by a number of unanswered questions. Are the school principals usually sufficiently experienced in the special character of their subject, or do they come to it sufficiently fresh and uncommitted, to do its possibilities justice? Do they, as a body, continue their contact with educational progress in ordinary schools, so as to keep up to date in general methods and curricula? How frequent on the other hand and how far wise is the tendency to prefer a curriculum-perhaps somewhat old-fashioned-suited to the needs of normal pupils rather than to devise one sdapted to the special case? Are there indeed, any generally accepted principles of instruction for this class of pupil at all, except for the employment of the special methods of teaching reading to the blind and speaking and understanding to the deaf? Do not the various institutions work too much in isolation from one another, and attempt too seldom to pool their experiences for the general benefit? Is it wise, as was done in at least one school, to make a deliberate principle of teaching-both in curricula and otherwise-the deaf child as though he were normal, instead of turning his abnormality to his advantage? Deaf pupils attempt to compensate for the sense they have lost by greater development of those they possess; is there enough advantage taken for instance of their strengthened power of observation? The curricula do not appear to have made a special feature of observational subjects, or the teaching generally of observational methods. Should not a child, deaf to the charm of music, be trained to be the more sensitive to the poetry of motion, the beauty of painting, of sculpture, and architecture? Is enough deliberately made of the other channels of possible development? Are the blind especially familiarized with music? Are their minds, in default of easy access to reading, stored with passages from good literature? Do they show, are they taught to find, especial onjoyment in poetry? Or, if not, are they read aloud to much more than other children-does this, and training in speech and thought apart from printed aid, form a special feature of their course,

Have the vocational possibilities, on the other hand, of the deaf and the blind been deeply and thoroughly considered? The practice seems to have been followed rather of preparing the pupils for any vocation for which there was an immediate

economic demand that they can be enabled to supply than of considering what they were best fitted for and of equipping them for that? Where deaf girls learn laundry work and dressmaking, could they not equally find interest in gardening, even perhaps in landscape gardening, with its special appeal to aesthetic and practical faculties? In regard to special systems of teaching the blind to read, would not the pupils benefit largely from an adoption of phonetic or simplified spelling in the Braille literature?

In teaching the deaf to speak and understand the spoken and written word, the so called 'oral' is superseding the 'manual' method. In one school visited the manual method of communication had succeeded in surviving among the pupils, who used it at every opportunity out of class; and every new pupil on admission quickly took it up. From the consequent lack of practice in 'oral' communication the pupils at the top of this school compared very unfavourably with those seen elsewhere. And the disadvantage can only be removed by drastic remedies.

And as in schools for blind children there is a radical difference between pupils blind through congenital disease and pupils blind from incidental causes, so in the 'mentally defective' schools are not the merely backward distinct from the mentally unsound? And are not the differences in both cases such as to justify a difference in treatment?

Questions such as those instanced above, it will be seen, are at least as much questions for the educational as for the medical expert, and in several cases can only be satisfactorily answered after considerable investigation in the light of the knowledge of the best educational views and practice. It is difficult therefore not to conclude that if the instruction of the blind, the deaf, and the defective, is to be organised for the best results, this can be done only by close and constant collaboration between medical and educational officers. The present system of inspection of these schools does not appear to secure this.

5. Inspectors and the outside world.

Having dealt with the means or the measures current for promoting unanimity within the elementary branch of the inspectorate and between it and other school inspecting agencies, it should not be out of place to conclude this chapter with a word on the relations that exist between the elementary inspectors and that wider public to whom after all they are finally answerable for their stewardship and in whose hands the national system of education ultimately rests.

As far as their formal responsibilities go there is no injunction upon inspectors to exercise direct influence upon the people as a whole, nor does any machinery exist for the purpose. Moreover, as Government officers, inspectors precluded from participating in political gatherings, or venting views of a distinctly political flavour. Nor in the pressure of multifarious duties is time easily available for entering upon public duties other than those of the inspector as such. But the opinion holds amongst some inspectors that the influencing or educating of popular opinion, and the enlightening of the public on educational matters, is something more than a work of supererogation on their part—is a real, if not an ostensible, duty. In common with not a few headmasters and others, they look out for opportunities of familiarising English democracy with the ideals and position of its schools and with its own responsibilities towards them. The headmaster, for instance, can-and sometimes does-make special efforts, by setting aside certain hours for the purpose, or by arranging entertainments or meetings, to bring the parent to the school, or, by reports upon his children's conduct or progress, to bring the school to the parent; and in large town schools in particular a head teacher can often acquire influence in his neighbourhood as a friend and adviser of parents upon a child's prospects and career, and is consulted by employers in search of promising workers. He becomes in effect an informal labour bureau. There are inspectors, in their turn, who endeavour to reach a still wider public in the working (and voting or trade unionist) proletariate, and to assist in the task of acquainting them with their responsibilities and fitting them-in whatever measure-for their fulfilment. It is frequent to hear criticisms of the schools from the man in the street, who however knows little of their difficulties, and forgets, or is unaware, that in the last resort he is their patron, and the school is his own. Nor is the employer so closely in touch with the school as he should be-but teachers, with the encouragement of inspectors can do a good deal by discovering the requirements of employers, and their opinion of the main defects of youths entering their employment, or by keeping records of ex-pupils' careers with employers' comments upon their progress, both to interest the employing class in the schools and to make the instruction more truly (not more narrowly) vocational. The inspectors as a

body are not unalive to these needs. There is indeed, one problem for the timely and harmonious solution of which the co-operation of employers would seem to be indispensable. economic structure of society is such that the pupil is constantly being imbued in his school life with interests which his later career gives him no means of satisfying. The work of the cotton operative, of the mechanical engineer, of the worker in a large timber-mill, the hundred and one occupations which involve for him at a stretch the monotonous iteration of a single set of muscular movements, mean that for purposes of further utility the greater-and certainly the higher-part of the individual workman's formal education has been wasted, and that, for the satisfaction of his personal interests acquired at school, he must depend upon his leisure hours. The nation's -and indeed, the world's-schools, are involved in a crucial dilemma. If they prepare only for probable vocation (according to the economic demands), then they deliberately ignore the general development of the individual. If, on the other hand, they try to make the best of each pupil (according to the individual's possibilities), then they are mis-fitting a large proportion for their main daily work in life. The educational inspector, aware of the problem, promotes the ideal of all round development, with a secondary and later and not too narrow adaptation to vocational requirements; but the practical solution can only in the end be compassed by the united efforts of school and employer and employed, and indeed by a general reconstruction of the whole social and economic structure of the nation.

When undertaking the rôle of a missionary of public education in the widest sense, the inspector is contributing his iota to the future solution of large problems of this nature.

6. Distribution of inspecting work in India.

From what has been said in this and preceding chapters, it will be gathered that to the district or divisional inspector, personal association with educational authorities of every kind, and sometimes indirectly with a wider public, is at least as important as the regular inspection of schools. His work is largely explanatory, expository, even missionary, though he has carefully to balance the merits of a policy of advancing his own views against one of deferring to those of authorities less familiar with educational principles. Much of the detailed inspection of schools is either left to the inspector of the local body where employed, or to the assistant inspectors of the Board

in the district, and the inspector has thus time to give also to undertaking and organising special inquiries and report of the kind exemplified in the chapter on this subject.

But in India for reasons given elsewhere and more especially because in a large class of schools promotions and appointments rest in his hands, the inspector's time is more fully occupied both with office work and with detailed school inspection. Some at any rate of the causes of this are not however unalterable, and if a hint from the English practice is worth considering, an arrangement whereby in a division a senior officer should hold general charge and be also specially responsible for the inspection in one district of his division, while a junior colleague could undertake the routine of inspection in the rest of it, might set an experienced officer free for much important work that now is either left undone or attempted imperfectly as a by-task. Besides giving more time and thought to questions of general policy, and to the general consideration and organisation of education throughout his division, he would be able to take up special investigations, above all into the many problems that beset the difficult subject of the development of primary education in different areas. At present primary education often receives from the inspector, busied in the daily inspection of secondary schools, little more than a cursory glance: and its welfare is largely committed to the hands of subordinate inspecting officers who are precluded from considering its requirements in the large, and are themselves entangled in merely inspection routine.

The distribution of duties between the two officers might be such as on the one hand to put the junior inspector through a valuable apprenticeship for the higher duties of his colleague, and on the other to enable the senior inspector to see something of all branches of education in every district in the division as a whole.

CHAPTER V.

Reports and Inquiries.

It is convenient to distinguish four classes of report or inquiry work with which the inspectorate is immediately concerned.

- (1) Ordinary reports on individual schools;
- (2) Reports upon special subjects, undertaken locally;
- (3) Divisional reports; and
- (4) Pamphlets and Suggestions published by the Board of Education for general circulation.

1. Ordinary Reports on Individual Schools.

In the days of annual examinations it was the practice to accompany the despatch of the examination schedules to headquarters with a formal report upon the general progress and efficiency of the school. Such reports varied in length and detail according to the idiosyncracies of the inspector from a concise estimate that might be given in a single sentence to a more or less elaborate appreciation of the school's work in different branches and subjects. But since the gradual substitution in the last decade of the nineteenth century of inspection for examination and more lately of visits without notice for the regular annual visitations, and since the annual award of grant is no longer dependent upon yearly estimates or statistics furnished by the inspector, no administrative necessity for succeeding a visit with a report remains; and except for a formal triennial report on each school required by the Treasury, in practice inspectors report as they think fit. Report writing for its own sake is however discouraged. A school report does not find its way to the school logbook until it has been submitted to the Board of Education, where it is itself 'inspected' by one of the Board's examiners, when it returns to the local authority-often accompanied by a comment, calling attention to some point of practical moment—and is copied verbatim in the school's logbook. This machinery is not called into play unnecessarily.

Usually, and in normal times, a district inspector (and the divisional inspector for the part of the division allocated as his district), aims at reporting upon each school in his area

once in every two or three years. And though examination of school logbooks shows cases not infrequent in which a school has had no report from the Board's inspector for a period as long as five or six years, in ordinary circumstances he would not deem it advisable to let too long a time elapse without some notice of the state of the school.

Inspectors also keep more or less clearly in mind a distinction between detailed school inspections and incidental visits; and a report that follows the former will not only embody or summarise the judgments of the various inspecting officers assisting at that particular inspection, but will take into consideration the impressions formed (though officially unrecorded) at incidental visits since the date of the last report.

A third point of interest is the comparative brevity of most of the reports (even after a full inspection), or rather the deliberate avoidance of any attempt to cover each of a recognised number of topics pertaining to a comprehensive estimate of the worth of the school in all its main branches. It is not that such comprehensive estimates are never attempted, it is rather that they are not regarded as a necessary or normal part of an inspecting officer's routine of work, though a thorough inspection may of course be called for on particular occasions. Thus the ordinary reports made by a . district inspector or his assistant tend to vary between two characteristic types—the report which conveys at more or less length a summary impression of the progress of the school as a whole, particularising, where it is considered worth while, on some special feature in the school's life (a class or a subject, the premises, organisation, etc.,) and a report confined to a specific point for a specific purpose, e.q., some specific improvement or other made since the last inspection, some building necessity that has been disregarded, some particular innovation in the curriculum, and so on.

But it is not often that one comes across a report that contains more than a few definite suggestions for change in teaching practice. The string of points for attention is conspicuously absent; a single general reform, or one or two particular devices or teaching methods, may be recommended, but as often as not construction is left to be implied through criticism, and adverse criticism itself has even to be read between the lines. As a body the English inspectors are cautious of condemnation, and, possibly for the reason that positive suggestion may presuppose some condemnation of

existing practice, their written reports are rather sparing of There are however good reasons for this attitude. In the first place, the board of managers, or the local authority where it has no inspecting staff of its own, relies upon the written reports of the Board's inspector for their own judgment of the head teacher and the staff, and the responsibility rests with the inspector of leaving no unfavourable impression unless it is indubitably justified and in any case of never going further than the situation warrants. The gentlemen of the local borough or council are seldom educational experts, and are not qualified to evaluate the amount of praise or condemnation that some particular teaching suggestion implies; there is a tendency to regard a positive suggestion as covering an actual dereliction in duty. Hence an inspector will naturally resort to understatement or simple omission, and will leave much spoken advice unrecorded. Inspectors have to face this difficulty when combining in the same report the two chiects of conveying to the local authority a faithful account of the school's condition and of including hints for the guidance of the staff. Some omit the latter altogether, some reduce it to a carefully expressed minimum; and a minority deal with these two functions separately, giving the general estimate for the local authority's notice first, and then going into some detailed criticism and advice for the benefit of the teachers. Local circumstances further affect the practice. Where the local authority has inspectors of its own, as in several counties and large county boroughs, particular school reporting may be-and often is-left largely to the local authority's officers, and the Board's inspectors may confine themselves to reporting in special cases. In a district on the other hand which consists chiefly of small boroughs in charge of elementary education but without educational inspectors of their own, the Board's inspector may make a point of reporting to the borough authority on each school once in every two or three years, but in a mainly urban district, where several schools are close together and within easy reach, he may prefer to trust to personal contact with the teachers, whether in the school or at more formal meetings, for initiating changes or In an extensive rural area, on the other hand, especially in the absence of any regular 'local' inspection, the tendency is to be more detailed and explicit in advice. are areas—especially rural agricultural areas in the South and West-in which the teachers are remote from current educational movement and trust to the inspector to keep them up to

date; in others the community is more independent and self-reliant.

These differences in practice are also partly due to differences in individual aptitudes or temperament—some inspectors for example are at home in conferences with teachers; others are more adept at the written word. possibly explains contradictory opinions encountered, one that it is imprudent to commit your advice to writing, because in that case it is liable to misinterpretation, the other that the only way to avoid misconstruction is to put down everything in black and white. It is worth noting that this difference of view as to the amount of detailed suggestion a report should contain is not confined to inspectors, for important headmasters are equally at variance. One headmaster of a large city school would practically abolish inspectors' reports altogether as inducing in the inspector a wrong attitude towards his work; his metier is to be the friend and minister of the world of schools, not the impersonal judge of the community of teachers; this business of reporting to an outside authority by concentrating his mind on the process of judging keeps him from the more useful missionary side of his duties. Another headmaster would prefer a longer, more detailed, more suggestive type of report; the inspector's work would greatly increase in value if he gave more time to suggestions and less to a general appraisement.

Since, however, the abandonment of the annual examination, the policy of the Board of Education has set steadily in the direction of promoting in the head teachers responsibility for the success and conduct of their own schools, and this policy also makes the individual inspector reluctant to advise too much.

In any case an experienced inspector is careful to keep within his compass. No one can know more intimately the special difficulties and circumstances that beset his school than the head teacher, and to expect an inspector, who sees it once or at most twice in the year, to make suggestions in detail applicable to his school in particular is to tempt him beyond his scope; on the other hand, as a trained observer of the problems and practices that obtain in a variety of schools, he would be equally wanting in capacity if he did not amass ideas and principles and expedients likely to be applicable in different sets of circumstances. How they should be modified in practice or whether they should be applied at all is for the head

teacher's further consideration; and, whatever his decision, he can fairly be expected to know, and to be able to state his reasons.

These, then, are some of the considerations that govern the extent and character of report writing of English elementary school inspectors. It is perhaps worth while adding that as a rule the worst schools get the most detailed notice. The reason for this is obvious. An adverse reporter must be quite sure of his ground, and at the same time in fairness to the school he must be precise. His report must therefore be exact and unmistakable on the particular defects that call for remedy but must contain enough to substantiate his points. Further, the report will lose much of its value unless it proceeds to suggest the most suitable remedies. In the case of inefficient schools, indeed, the inspector usually attempts to rule out the personal equation in judgment by calling in the assistance of other inspecting officers and the evidence which the report contains will be that submitted by them all.

On the other hand there are instances of long and carefully written reports in appreciation of specially good schools, where the inspector may think that an appreciation will encourage the staff or management, or that the merits of the school are of such a peculiar character as to be worth recording, and that their record may have some influence on the educational world outside. There are inspectors, too, who prefer to concentrate attention upon the best schools in their area, believing that more good is done by encouraging and guiding the enthusiast than by attempting to rouse the sluggard. In an urban area, at any rate, where schools are near one another, the claim is made that the proximity of a specially excellent school has a good effect upon others.

2. Reports upon special subjects, undertaken locally.

As inspecting officers are no longer expected to submit periodical reports upon each school in their areas, of late years the practice has been growing of undertaking inquiries into special subjects. Since the Act of 1902 entrusted public education to local borough and county councils, these bodies have in several cases appointed school inspectors or educational officers of their own. Some of the big borough school boards (e.g., at Manchester and in London) had already had such inspecting staffs for several years, and the practice has been extending gradually in the present century. Some changes

which resulted from the measure of 1902 in the character and function of the Board's inspectorate have been noticed elsewhere. As the immediate supervision and provision of schools of every grade has fallen to the local body, it has been possible for the Board of Education to undertake the work of organising sources of educational information and disseminating in convenient fashion results, criticisms and suggestions derived from a continuous recorded observation of each kind of school over a wide area. (Report of Board of Education 1904-05.) In 1906, again, the inspector was formally relieved of the necessity of paying a visit to each school every year, a measure expected to enable him to see more carefully the work of certain selected schools, or the teaching of particular subjects, or to consider the methods of dealing with particular problems.

Consequently in the last ten years a revolution—beginning with a special inquiry into certain defects in a group of schools in the North-West Division, undertaken by a number of inspectors in that area—has been gradually taking place from a system in which the inspector was mainly occupied in investigating many subjects in each school to one in which he investigates a particular subject in many. The revolution is not and may never be complete; in areas where the local authority has no inspecting staff of its own the business of detailed inspection of individual schools still falls to the Board's inspector, with less time in consequence for separate inquiries. But the practice varies from that obtaining in a big town area like London (whose County Council has a staff of forty or more inspectors—some of them specialists), where the work of the Board's inspector is mainly special in character, to the extensive rural district (as, e.g., East Sussex) or the district composed of small boroughs (e.g., that comprising Blackburn, Preston and some ten manufacturing towns in Lancashire), where the local authorities, though one or two have an educational director, leave the detailed inspection almost entirely to the Board. But even in such cases the Board's officer seldom confines his energies to simple separate school inspection, and will, from time to time, as occasion warrants, undertake inquiries of a special kind. For a state of things never occurs in which the welfare of education can be best promoted by an annual itinerary of single inspection without stopping to make special observations by the way. These inquiries are never abstract or academic; they are noticeably practical and concrete in character. nearly always undertaken to meet some present need, to remedy

an actual defect, or to anticipate a menace, and they serve firstly to elucidate the facts, and then to propose either a remedy or the lines along which a remedy may best be sought. In this way a mass of useful guidance is put at the service of local bodies, of school managers or principals, and of the inspecting staff themselves. Examples of reports on such inquiries are the following:—

- (1) On infant schools in Manchester.
- (2) On the organisation of technical, continuation and evening schools in a large city-borough.
- (3) On needlework and domestic economy in a group of selected schools.
- (4) On organised games in elementary schools.
- (5) On an experiment in teaching English and history in a certain school.
- (6) On accommodation in the schools of a particular area.
- (7) On school gardening in Cheshire.
- (8) On handwork in London elementary schools.
- (9) On internal examinations in London elementary Schools.
- (10) On classification and promotion in a certain local group of elementary schools.
- (11) On classes held in playgrounds and open spaces in London during the summer of 1913.
- (12) Upon school journeys under the L. C. C.
- (13) On some educational experiments carried out in public elementary schools in Shoreditch and Stepney.
- (14) On London central schools (1914).
- (15) On the teaching of science to boys in certain public elementary schools in London.
- (16) On the use made of the workroom of a London County Council School's Boys' Department.
- (17) On the supply of books, stationery, and apparatus in the public elementary Schools of an inspectorial division.
- (18) On the teaching of singing in London elementary Schools.
- (19) On school gardens in London.
- (20) On schools for very poor children in London.

The above list of some inquiries made within the last two or three years in two divisions in England will give an idea of the nature and scope of the work undertaken.

These investigations emanate as a rule either from district or divisional inspectors, being undertaken as the occasion (i.e., the needs of locality or their general utility) seems to The work is most carefully done. In a typical case the inspector initiating the inquiry seeks the help of a number of colleagues or assistants, to whom, after conference and a settlement of the particular lines the inquiry can most usefully take, different branches of the work are distributed. Ordinary visiting may be largely abandoned for the time being, and the inquiry may extend into several weeks or even months. investigating officers keep in close touch, and can compare notes as they go along. As matters of fresh importance or new points of view emerge, a more formal re-discussion may lead to a revision of the original intention or a change of programme. A single officer is made responsible for drafting the report, and receives the various contributions of his colleagues after they have run the gauntlet of criticism from the restat meetings convened for the purpose—or from the officer in general charge.

The reports which result from these inquiries are often of considerable value. Though undertaken commonly in local areas, they usually deal with matters of general interest in public education, and when they find their way to local authorities, school managers, and head teachers, they serve to promote and to co-ordinate progress in all areas. They help to give direction and unity to movements that are constantly beginning here and there in England but threaten in the absence of recognised principle or a clear lead to stray into unprofitable channels.

Apart from the general utility of the published reports, to an inspector, accustomed to a round of inspection of particular schools, the special inquiry is a relief and a corrective. His mind is revived from the variety imparted to his work, and from contact with his colleagues. And matters that might otherwise escape his attention, or share it equally with others, are now separately probed and studied; important aspects of school life are revealed that might otherwise elude the light. The inspector views his subject from new standpoints, and may thus add as it were another item to his ordinary inspecting repertoire.

3. Divisional Reports.

Since the Education Act of 1902 the submission by inspectors of regular periodical reports upon public education in the areas under their jurisdiction has not been expected; and even before that date, the practice of annual reporting upon every administrative area has never obtained. The eighty or ninety districts were arranged into groups for the purpose of reporting, and reports from these groups were prepared in successive years, the whole country being thus covered in three or four years. In the year 1880-81, for example, the general report on Education of the Education Department contains separate reports from twenty-two districts. Later on when the districts were arranged in larger units called Divisions, these were reported on as a whole, and five such reports (covering that is, a half of the country) are contained in the Board of Education's report for the year 1900-01.

After this date however the submission of 'area' reports of this kind as a matter of routine ceased, but the principle has been substituted of obtaining reports upon the larger administrative areas at sufficient intervals to secure a continuous record of educational progress throughout the country. In point of fact the first ten years after the Act of 1902 witnessed no general 'area' reporting of any kind, but in 1912-13 reports were undertaken for two Divisions typical of characteristically different conditions in England, the North-West, and the South-West Divisions. Owing to the death of the officer in charge of the latter, the report on the North-West Division only was completed and is embodied in the Board's annual report for 1913-14.

This change in practice has corresponded with changes in the character of the reports themselves. In the era of 'denominational' inspections before 1870 areas as such were not surveyed in reports at all; but with the grouping of schools of all denominations under single inspection 'area' reporting became practicable. But the reports in the 'examination' era in their matter and manner indicate a narrower conception of the inspecting responsibilities than prevails to-day.

The reports of that era were concerned largely with the questions of the supply of educational machinery, and of school attendance, and with separate estimates of pupils' progress in each school subject. The former was natural in the early days of 'universal' education, and the latter reflected the current influences of the examination and payment for results system.

The reports commented more upon attainments than ability, upon results than upon procedure; excursions into the realm of method in teaching or into a general discussion of the state of the instruction in the schools as a whole were occasional and incidental only. Broad questions were not often asked or answered; suggestions for improvements in teaching were usually confined to the recommendation of small devices or at most to partial and inadequate remedies. In those days the principles of the teaching of the various subjects were not agreed upon nor understood, and each inspector promulgated such happy thoughts on the subject as came into his head, sometimes practical and to the point, but which often, if analysed, would be found to be based upon assumptions opposite to those which underlay the recommendations of a brother inspector elsewhere. The subjects of instruction again were dealt with as separate items in the school's educational repertory; the school both in pupils and in subjects was viewed from an atomic standpoint; there was little realisation of the curriculum or of the class, or of the school, as an organic whole.

And the style in which reports were written, if not actually pompous, was at any rate more 'aloof,' more 'official,' less natural and humane, than has become the fashion to-day; this was in keeping with the rather detached and superior attitude adopted by the earlier inspectors towards the schools.

After the appointment of Chief or Divisional inspectors, where the large divisional areas became units for report writing, the district inspectors submitted reports to their Chief inspectors, who concocted a summary of the lot rather than a comprchensive survey of his whole area. In 1890-91, for example, the divisional reports are little else than a succession of extracts from the remarks of district officers and the interest ·that might have been imparted by an attempt at a general view of the situation in the whole area is sought for instead by a sprinkling of purple patches, selected from district reports, upon details. The subjects of the curriculum came in as before for a good deal of attention, but reflections upon methods of instruction are more frequent, and more informed and suggestive. With the measures adopted to abandon individual examinations of pupils, and the payment of grants against particular subjects, the 'area' reports reflect the broader and deeper view that was now being taken of education, but the method of accumulating extracts still persists.

In the most recent report (referred to above) that of the North-West Division published in 1914, this plan has been

definitely given up. A single officer was charged with the preparation of the report, and given a free hand to review the progress and condition of public education in his area in the way he thought best. "At the same time interest is added to the review by the very absence of reports in the preceding decade. Instead of a review, under more or less set headings. of smaller or greater occurrences within a short and recent period, we have a freely written historical document of permanent interest, comprising a running contrast in conditions between the beginning and the end of the decade under review with some exposition of the main movements and problems with which it was concerned. Such topics include, for example; the effect of staffing schools with purely local teachers (a kind of 'inbreeding' in education), a comparison between the trained teachers of to-day and of ten years ago, various results of the change from examination to inspection, and of the liberty allowed head teachers and local authorities in choice of curricula, the development of practical activities in schools. and of the school as a social centre and a labour employment agency, and the revolution that is taking place in the conception of the scope and variety of the school's work. At the same time room is found for the ordinary items of school reports in general-accommodation, supply, staffing, instruction, and so on.

A long report written at occasional intervals can deal at some length and to some purpose with questions upon which the briefer annual report can scarcely touch. The tendency of short dated reports is, for lack of new movements sufficiently developed or realised to record, to keep to a similar series of topics, and to give to each an even, rather than their due, emphasis. If a report is to be interesting, and not a perfunctory touching on heterogeneous events, it must be able to detect important movements clearly and to follow them some little way in their development, while neglecting the purely trivial. Reports at too frequent intervals lack perspective, and their very frequency makes them too familiar to attract notice.

It is natural in view of the English practice to put the question whether the periodical 'area' reports on education are not too frequent in India; what advantage, specifically, is obtained commensurate with the time and trouble taken by inspecting officers in compiling six or seven descriptions (in reports on each district and on the division as a whole) of the state of education in an Indian division every year? A report

if it is to be of use should affect future action, and it may be queried whether, for purposes of practical politics, a review, undertaken at sufficient intervals to admit of due perspective largely of changes or new movements sufficiently developed to facilitate or repay an account of them, is not more valuable as a guide to action than a yearly compilation mainly taken up with comparative details arranged under a series of prescribed subject matter. Or if annual reports continue to be required, would not a summary of statictics and data useful for the occasional larger survey suffice for the purpose?

Is a yearly reconsideration of controlling agencies, the work of philanthropic bodies, the state of secondary and of primary education, the supply of teachers, the cost of education, the condition of buildings, and so on, worth the while? Or possibly the selection of one of these topics for special treatment each year, or the distribution of particular topics amongst different divisions in a province, would be an improvement on the existing system, and would tally with a plan by which the divisional inspector could transfer part of the time now taken up with the ordinary routine of inspection to the undertaking of special investigations into one or more of the many problems that beset educational progress in India.

4. Pamphlets and Suggestions published by the Board of Education.

Characteristic of the change that has come over the spirit of public education in the last quarter of a century is the change in the character of the printed matter that issues from the Government press. In the old days much of this matter was in the nature of directions and instructions, and just as the schools and the teachers were drilled and regularised as to subjects, standards, and methods of teaching, so the inspectors? programmes and procedure were kept under pretty tight control. This was done by means of frequent instructions issued from headquarters, detailing to inspectors what to do and what to avoid doing, and any change in the code or the school curriculum was accompanied by directions to inspectors explaining the intentions of the measure and how exactly these intentions were to be fulfilled. The present century has witnessed an almost complete abandonment of this policy of dogma and prescription. The literary output of the Board of Education has very greatly increased, but the place once taken by instructions to inspectors has now been taken by suggestions for the consideration of teachers and others interested in public

education, or by pamphlets published from time to time upon various topics of educational interest. The Board now addresses the teacher and the educational—or even the general—public, not its own agents only, and that in terms of suggestion or recommendation, not of authority or behoof. The school is public property, no longer a Government reserve.

The pamphlets and circulars prepared by the Board of Education often bear a direct relation to the special investigations undertaken locally by inspectors. It is in effect the business of the inspector to discover and elucidate the practical problems of education in his area, as they arise; where such problems are purely local in their reference or solution, to submit a report upon them to the Board of Education would be superfluous; but where a subject is-or seems likely to he-of general importance, it is as much a duty of an inspector who has dealt with it to put any useful results of his inquiries at the disposal of the public at large as it is of a medical investigator to publish the results of research. Reports upon local inquiries are therefore often submitted to the Board of Education, and frequently inaugurate a more general investigation, or collection of experience and opinion, the conclusious of which emerge in due course in the form of a pamphlet on the subject circulated from Whitehall. The Education has in fact in recent years made the publication throughout the country of the best practice, experience, or opinion, upon practical school concerns one of its normal functions, and, through its office of Special Reports and Inquiries, initiates and prepares pamphlets on educational topics often dealing with matters not within the immediate scope of inspectors working in England, as for example on School Doctors in Germany, on the Problem of Rural Schools and Teachers in North America, on Farm and Agricultural Schools and Colleges in France, Germany, and Belgium, and several others.

Reports or pamphlets dealing with home education more especially, prepared by the Board either in its office of Special Inquiries or otherwise, include, in the case of elementary schools, the teaching of each subject of the curriculum, the methods of instruction applicable to pupils at each stage, organisation and staffing, and the arrangement of curricula, syllabuses and time-tables in schools, physical training, nealth and discipline, manual instruction, infant care and management, lessons in temperance, and the teaching of domestic subjects; in the case of secondary schools, examina-

tions, the curricula of secondary schools and of ruralised secondary schools in particular, physical training, the teaching of various subjects, and the 'practical' work. Some of these matters are dealt with in the form of reports of the current practice or opinion, others of recommendations of principles for general guidance. They are always however so worded as to leave entire local freedom of action, and are intended to place in a convenient comprehensive form the best that is yet known on the subject for the benefit of the local authority or the teacher.

In the preparation of these publications the inspectors naturally have an important share. As a rule the actual compiling and drafting falls to them, but care is taken to cull experience and useful advice from every source available. Perhaps a point to emphasise is that the memoranda derive little from book matter or from academic treatises, most from living current or previous practice. The sources of information are in the main the working experience of people actually engaged on the very problems concerned, in schools colleges or cognate institutions; and the recommendations which result are usually such as have already stood the test of experiment. A point which one is apt to overlook is that in England-as indeed elsewhere-we stand at the beginning of a public system of education, and-it might be added-still not far from the beginning of the study of the science and art of teaching and of school work generally. Since the nineties amongst professed educationalists, and since the Act of 1902, amongst a wider interested public, developments in educational principle, practice, and administration, have been more rapid than ever before. Movement tends to be various and sporadic, and the Board has made it its object both to set and to check the pace, and to guide the current along safe channels. New practice is tried and discarded, and principles evolve as practice goes on. The Board's memoranda should form an interesting record of the best practice at every important stage, and of the gradual evolution of principles as they emerge. It is thus a merit and a sign of life that the suggestions issued from headquarters in one year may be modified or in part even contradicted by those which follow five or six years later.

The well-known 'suggestions for the consideration of teachers' are a case in point. They were first issued ten years ago, containing chapters on most subjects in the elementary curriculum and on the organisation of the elementary school.

Their preparation involved careful inquiry on all sides extending into years. It was necessary to begin with to discover the particular individuals-not necessarily inspectors, often practising teachers-most interested or informed experienced in each subject concerned. When enough representatives of the different standpoints in regard to the subject had been discovered, a meeting was convened at headquarters to settle the most profitable lines for further inquiry. Local sub-committees were then chosen to carry this programme of inquiry into the country, and to elicit the views and probe the experience of local headmasters and others interested. The local sub-committees then reported back to headquarters, and the body of material thus collected was sifted and co-ordinated by the inspector in charge of the subject. His draft was then submitted for opinions to any bodies whose views were likely to be of value (e.g., to the authorities of agricultural colleges and societies, and of training colleges, in the case of rural subjects) and after the return of these reports the suggestions in the various topics were again revised and put into form for final publication.

It will easily be seen that the effects of this procedure are not confined only to the direct influence of the 'Suggestions' as finally issued. The process of proparation of the pamphlet has also involved a process of preparation of the educational public. The actual procedure is one of awakening general interest and inquiry—there is general discussion, conference, and stir, and progress has been stimulated and public opinion has already been partially affected before the actual circulation of printed matter. The inspectors themselves from any general instructions and advice have in the process of investigation learnt the scope and possibilities and the present position of the subject in question, and are thus already equipped for promoting the next advance. circulation of the 'Suggestions' supplements the process of inquiry by reducing the subject to perspective and as far as possible to principle for general guidance, and in universalising what is already best in local or occasional practice. If it is the peculiar function of a district inspector to glean from. school to school improved practices and promising ideas and to spread them throughout his area-adapting his counsel to the circumstances of the case—so the Board has assumed the role of spreading through its printed circulars principles. gathered locally, but applicable in some shape or form throughout the country.

It is significant of the Government's view of its duties that, in the first place, the various syllabuses and treatises in teaching are deliberately given a tentative character, and, in the second, that they are subject to intermittent revision. Educational procedure is fixed neither in place nor time. It falls to the local authority and the school principal to adopt the Board's recommendations to the place, or even after examination to replace them with better; the presentation of fresh changes or developments with the course of time is the concern of the Board. Thus the 'Suggestions,' first issued in 1905, were reprinted with revisions of separate chapters in 1912 and again in 1914, since when further chapters have already appeared separately in revised form.

CHAPTER VI.

The Inspection of Secondary Schools.

Although for reasons elsewhere given I was unable to be present at secondary inspection of the detailed kind treated in this chapter, yet the procedure of inspection as described by inspectors offers a sufficiently interesting contrast to that followed in elementary schools to justify on its own merits some exposition and tentative discussion, which may possibly be of service to those engaged in the inspection of high schools in India.

The secondary school is distinguished from the elementary by the fact that it admits pupils usually at a later age and carries on their schooling to eighteen or nineteen. Its curriculum is consequently of a different type, and with courses of study more advanced than in elementary schools, the appraising of the work in the different subjects is beyond the scope of a single inspecting officer. The detailed inspection of a secondary school thus becomes the business of a number of special officers, who visit the school at the same time. The officers available for the work are naturally fewer than for elementary education, and the programme of inspection dates for the school inspected by the Board have in consequence to be carefully arranged in advance with due allowance for the convenience of each officer concerned.

The 'full' inspection—as this prearranged visit is termed—is the characteristic feature of secondary inspection in England. It is conducted at intervals of four or five years, and is intended as a periodical revision of the whole activities of the individual school—a re-examination of its condition, a revaluation of its worth, and a reconsideration of the most profitable lines for its future development.

The group of inspectors who conduct this inspection includes the inspector for the district who is in charge of the report writing, and some of them are specialists in particular lines called in for the purpose, who penetrate the school for a period of from two to five days, to emerge at the end with a mass of information on which to base a complete estimate of the school's condition in all its branches. In selecting the inspecting officers for this group inspection, the Chief Inspector for secondary schools can draw not only from the whole of the English secondary school inspectorate, but also upon the

other inspection branches, and from a number of specialists in particular subjects like music or handicraft. It is a practice in assigning secondary district inspectors their areas, so far as other circumstances permit to place men with complementary qualifications in adjoining areas, a science man within reach of a classical or modern language man, and so on. In this way it seldom becomes necessary to make very distant calls for service, except say in the case of a specialist in botany or some more recondite subject which happens to figure in the school's curriculum. At the beginning of the inspection the work is distributed amongst the different inspecting officers, and as a rule the investigation of the more general organisation of the school falls to the district inspector concerned.

Where a group of half-a-dozen officers thus settle upon a school of, say, three or four hundred pupils, a difficulty is so to arrange the programme as to avoid upsetting the ordinary timetable or wasting an inspecting officer's time. The only way, indeed, in which each of a number of separate officers with different special subjects or lines of inquiry can avoid intermittent vacant intervals is frankly to abandon adherence to the ordinary time-table altogether by allowing the inspector to take the class in his particular subject, irrespective of the lessons assigned for that period on the time-table. With a little pre-arrangement it should then usually be possible for each man to take successive classes (or sample class sections) in his subject without crossing the programme of a colleague. however objections to a plan of this kind. The formal inspection is in any case an ordeal to the ordinary teacher, which may indeed be somewhat softened the less he is disturbed in his ordinary class work. Where however his class is liable to be tested in any subject at any moment, the ordeal increases in severity, and the inspector finds neither class nor teacher at their moment of average capacity. Unless indeed the inspector happens upon a subject on the time-table for the day, and for which the teacher could reasonably be expected to have prepared, it is unfair to test the teacher's handling of a lesson at all, for it is impossible to make due allowance for deficiencies caused by nervousness or unpreparedness or peculiarities of temperament which may mar a teacher's 'inspection value' without affecting his worth as a teacher. The attainments of a class however unless the teaching, in its nearest approach to the ordinary, is seen also, are an insecure indication of the worth either of the class on the one hand, or of the teacher on the other. A good class may have been spoilt by a bad teacher, or good teaching handicapped by a weak—or specially circumstanced—class.

If then the inspector is to see the teacher and the class in their nearest approach to the normal, he can do this best by adhering to the usual time-table of the day. But in this case except when the period for his subject in any class comes along, he remains unoccupied and his time is wasted; or he may eke out the time, with insufficient profit to compensate, by watching what is going on elsewhere. The criticism is, indeed, levelled against this 'full' inspection that except for the reporting inspector, who investigates the organisation and general arrangement of the school, time is generally wasted in this way; and it is difficult to see how the dilemma can be evaded.

The actual classroom procedure in inspection differs somewhat from that of the inspector in elementary schools. The tendency is to give more attention to watching the oral lessons or whatever work is proceeding—perhaps there is more to be learned in this way of a teacher's efficiency, of his adaptability and resource, where as in secondary schools he has had a higher general education, though often untrained, than where a teacher has imbibed his principles from special courses. There is also, of course, more time for an individual inspector, who is one of a group of five or six spending several days at a single school, to probe deeply into various aspects of the teaching of his subject than for one or two inspecting officers spending usually less time in an elementary school of equal size.

The Board of Education provides its inspectors with forms in the shape of printed note-books detailing the points regularly investigated and subheadings suggesting lines of inquiry under each. The main points comprise the following:—

Full Inspection arrangements — Time-table — Staff—Syllabus—Analysis of Time-table—Notes on the time-table—on the staff—on the subject syllabuses—Points from the preceding Full Inspection Report—Notes for Conference with the Governing Body—Premises and Equipment—Curriculum and Organisation—Junior Schools—Notes on lessons heard—Number and ages of pupils.

The inspector charged with compiling the report, who for schools other than the non-local public schools (like Rugby, Repton, etc.), is the district inspector, uses a slightly more elaborate from with additional headings for notes on the

governing body, the nature and scope of the school, finance, scholarships, exhibitions, the headmaster and assistant staff, the general school activities and corporate life, and general conclusions. Before the inspection begins each inspecting officer is also furnished with a copy of the time-table and curriculum from which he can extract the particulars he wants for his part of the work. And each inspector has access also to the previous report upon the school.

The reporting inspector is in general charge of the inspection; and it is his business—besides distributing the work in consultation with his colleagues—to investigate separately the more general circumstances and activities of the school, corresponding to the additional headings mentioned above, together with its curriculum and organisation, premises, equipment and time-table. The form with which he is provided amounts in fact to a detailed questionnaire, the items upon which he discusses with the headmaster at a time—usually at the beginning of the inspection—set apart for the purpose. The elaborate nature of the questionnaire may be illustrated from the series of items noted under two of the main headings, viz.:—

· Premises and Equipment, from the point of view of school efficiency, including—

- (a) Accessibility and situation of buildings.
- (b) Number, size, arrangement, suitability, and general appearance of class-rooms; school hall; library; laboratories; accommodation for housecraft; rooms, including lavatories, for assistant staff, etc.; ventilation, heating, and lighting; provision and condition of sanitary arrangements, including offices and lavatories; and arrangements for periodic testing of drains; fire appliances and means of escape.
- (c) Furniture and apparatus (including maps, pictures, musical instruments, etc.), noting provision (if any)
 (i) of works of reference, (ii) of lending library, (iii) of museum.
- (d) Playground, gymnasium, swimming bath, changing rooms, playing fields, or other provision for games and outdoor exercises. Adequacy and accessibility of grounds, etc., provided.
- (e) In the case of boarding houses, including hostels: single rooms, cubicles or open dormitories, studies;

dining-room, library, preparation room, common room for pupils; changing rooms; sanitary arrangements, including supply of baths, internal and external offices, lavatory basins, etc.; provision of sick rooms or isolation wing, with separate sanitary arrangements. Precautions against fire; means of escape and fire appliances. Provision for effective supervision.

Curriculum and Organisation.—In this connection school documents, e.g., Prospectus, Pupil's Report Form, Registers of attendance, conduct, progress, etc., should be consulted.

- (a) Admission—(i) Tests adopted, whether graduated and systematically applied;
 - (ii) Special arrangements for classifying pupils from P. E. Schools;
 - (iii) Remarks on extent to which such pupils (including P.T's.) are fully incorporated in the school.
- (b) Curriculum and Time Analysis. (Form 2 S., page 2: Form 3 S.)
 - (i) Main characteristics of the school, special bias (if any); Courses or Sides (if any); main subject groups, compulsory, voluntary, alternative. Note the Forms or Sets in which the several languages and the other important subjects are begun and are discontinued. Specialisation (if any) and special courses. Balance of studies, satisfactory or otherwise.
 - (ii) School hours—total per week, general length of lesson periods; amount of home-work.
 - (iii) Distribution of time amongst different subjects, and of daily and weekly periods.
- (c) Organisation, Form and Set system; provision for securing grading of pupils and proper relations of the work in succeeding stages; promotions, annual or otherwise; superannuation.
- (d) Examinations. External and internal—their influence on the work. Are the external examina-

- tions selected suitable for the School? (Application to Pupil-Teachers.)
- (e) Class-room discipline. Application and diligence of the pupils. System of recording work (marks, reports). Rewards and punishments. Detention, extent and nature. Written work, and home-work, whether properly arranged and tested.
- (f) Pupil-Teachers and Student-Teachers. Method of organisation and effect on general system.
- (g) General standard of work attained.

The advantages of a fixed elaborate detail of inquiry are open to question. In theory a list of topics covering all the important aspects of a school should remind an officer on matters that may else escape his memory and assist towards a complete survey of the school. It is also true that a detailed investigation of this kind often opens up interesting side issues that might else be missed. A secondary inspector has stated that the discussions to which the questionnaire gives rise are one of the most valuable means in the inspection for bringing out the school's distinctive character. Perhaps,-but it is equally arguable that this even attention to a regular succession of details is just as likely to withdraw observation from a school's distinctive peculiarities, or to satisfy the inspecting conscience when important features of the school are overlooked. fixed questionnaire may also be considered a superfluously circuitous method of arriving at essential facts. In general practice indeed an inspector, who knows his job, knows also just how far he as an individual can dispense with inspecting mnemonics,' and few experienced inspectors make much use of them.

During the conduct of the full inspection inspecting officers have opportunities—formal and informal—of comparing notes on the results of their work, and incidentally of suggesting any points for general attention that may occur, and towards the end of the period it is usual for the inspecting staff to have a more formal discussion to arrive at a common view on the worth of the school and the qualities of the staff, etc. The inspecting process is thus, in effect, a gradual arriving at common conclusions on the part of the several investigators, working more or less independently.

The headmaster in the meantime is in constant contact with one or other inspecting officer, thus assisting in the detail-

ed inspection of his own school. At the close of the inspection a conference is held of the inspectors with members of the governing body, first usually in the absence of the school principal, to raise matters affecting him personally, and then, for more general topics, with him present.

The report compiled by the reporting inspector from the contributions of his colleagues and his own findings is written on a form officially provided of some sixty foolscap pages, with headings and points of inquiry sufficiently comprehensive to cover the ground common to schools of all sorts, and to enable the inspector to treat or omit as he thinks fit. The report aims at supplying, for official use, data as to the efficiency of the school, and at presenting for the information of governors and the local authority a readily intelligible survey of the school. The report form or file comprises not only this report for publication, but a copy of any notes to be kept for the inspector's information but not included in the published report, and a minute of the conference held with the board of governors.

Such a report may occupy—in addition to statistical information—anything from ten to twenty foolscap pages, and, dealing as it does once in three or four years with every important aspect of the school's activities, would be one of a series, the whole of which should form a continuous history of the school's development punctuated by a detailed exposition of its state at successive intervals of time.

It would probably not be worth while to give samples of matter recorded under the headings dealing with the general constitution and organization of the school. The following example illustrates the detailed way in which particular subjects of instruction are dealt with:—

Mathematics. 'The school has lost the very able master who was responsible for this subject at the time of the last inspection, but his successor, who had the advantage of working with him for some years, is well qualified, is a strong and capable master who is not only a good teacher himself but is well able to give his colleagues useful guidance and help. Of these one only has substantial mathematical qualifications, the others, though they are doing useful work, need more help than they are at present getting, either because they are young and inexperienced or because they are not mathematicians. It would probably be a great advantage if the Chief Master could not only give, as he does give, useful directions in writing or at meetings, but if he visited his colleagues at work in their

classrooms, so that he could more thoroughly know their difficulties and be in a better position to help.

The four highest forms are re-divided into Sets (at present five, but with the shrinkage of these forms the number may be reduced). In these sets the boys do Algebra, Geometry, Trigonometry and some mechanics, with higher work in the top set. In addition Arithmetic is done in forms, and there are two special sets for more advanced mechanics. The style of the work done is indicated by the requirements of the Civil Service Examination.

In the rest of the school the work is done in forms, and in most cases Masters take one form only, so that a good many men are concerned. In some of the lower forms the work has been upset by change of teachers during the term owing to the war.

While a great deal of steady conscientious work is being done, the general impression was formed that the standard reached was not as high as it ought to be. Only in one case is the teaching bad, but in too many there seemed to be a lack of clearness and force, due often to lack of appreciation of what was really important, as distinct from mere matters of convention or insignificant detail. The custom of the school is to attach great importance to homework, and to mark it carefully, and further to go through it all on the blackboard. This, of course, is excellent within limits, but in many cases it leads to work being done on the blackboard which the majority had already done right, and of those who had not many had made trivial mistakes that they should themselves have corrected. The result is that during lessons boys are often doing little; they probably miss too the little bit of help given at the right time when they are in real difficulty that would enable a boy to go on by himself, getting instead the excessive help that tends towards weakness.'

The full inspection has been dealt with at some length because it is the characteristic feature of secondary school inspection. The district (or more accurately—as his area may comprise more than one district—the territorial) inspector is also engaged, in intervals between full inspection, upon casual visits to the schools in his area. It is his business to know his schools as intimately as his time permits, and to be available for consultation with their head masters or managing boards or with the local authorities on any question that may arise.

In other ways the short visit has an important place in the inspecting economy; it can serve different purposes effectually,

provided it does not attempt too much. At a casual visit an officer has an opportunity of watching, and possibly guiding. the progress of reforms previously recommended; or he can remove any doubt he may hold of the merits of some particular experiment or line of action, or of the work of a teacher, or he may explain some innovation that may be part of his general policy for his area, and for which he thinks the school in question favourable ground, or he may investigate some branch or feature of school work which he is inquiring into generally, or, again, he is sometimes justified in coming merely for a talk with the headmaster or his staff on school topics or things in general—this especially in cases where there is personal difference or mistrust. The casual visit or inspection covers a number of useful purposes, and alike in secondary and elementary inspection is an essential part of the inspector's work; the important point is to confine it to some object that it can achieve in the time, and not to base on it a report meant to convey a general impression of the school's value.

This plan of conducting once in four or five years with the help of a group of specialists a thorough investigation of each important school, when compared with the less uniform elementary inspection system, which leaves the nature and period of inspections more to the individual inspector, raises questions. of practical interest. Assuming inspection to serve as a means of incentive and guidance to a school, there is the question of its frequency. From this point of view, it seems an obvious thing to say that, prima facie, a bad school needs inspecting frequently, and a good school infrequently, if indeed at all. And if so, the plan of seeing all schools at regular intervals is unsound. On the other hand it is often the authorities of the better schools, who have more to hope from the results of the inspection and less to fear, especially of schools with higher aspirations that feel the need of help and encouragement, who actually welcome inspection in spite of the ordeal which it involves. No hard and fast rule of frequency can, indeed, be laid down, it cannot be regulated with the school's place in a scale of excellence. Some good secondary schools - especially the large public 'non-local' schools-might resent outside interference, through a dislike of having 'to toe the line' and a fear of being measured to arbitrary standards of uniformity: some really bad schools would gain little by inspection in any case, and continue in the old grooves. The only safe rule is to do without rules, and to arrange inspections when and where they seem, on the merits of each case, to be needed. At any

rate—as an incentive and guide—the inspection at fixed intervals seems to have little in its favour; it may result in vain repetition here or be insufficiently frequent elsewhere.

In the abstract again there is something to be said against the nature of the full inspection as such. All schools do not require the same general or thorough treatment, for which the 'full' inspection with the detailed questionnaire provides. is usually superfluous to repeat—even at four-yearly intervals -an examination into much in a school's constitution, general character and organisation, that may remain constant for long Indeed, where the district inspector has remainedas he is supposed to remain—in contact with the school from year to year, he must come to the 'full' inspection already familiar with the main facts about the school, and any elaborate procedure should be unnecessary. The other feature of the inspection is the use made of specialists. The value of the specialist's investigation and advice depends especially upon the individual. Theoretically, no one should be better able to offer useful advice and guidance on the teaching of any particular subject than the man who has made that subject his special study. But in practice if he is to use his knowledge with success, certain conditions must be fulfilled. He should. in the first place, be familiar not only with the subject but with the methods of its presentation, and with these not only in principle but from personal practice. Otherwise the working teacher whom he advises might be better equipped for inspecting than the inspector himself. Again, he must not be committed to any one method of teaching in particular, or at any rate he must be very careful not to let his pre-possessions affect his estimate of the school's teaching; he should be able to judge the actual method in vogue without bias and in the light of the actual aims and circumstances of the teaching. Further, he must avoid the specialist's tendency to exaggerate the importance of his subject, and to demand special attention, and possibly a special place, for it on the time-table. Besides this, he must often be content to let well alone; the temptation of the efficient officer is to justify his existence by suggesting positive improvements rather than to let a keen teacher work out his own salvation. A good inspector may be content merely to pronounce a blessing. And lastly it is often true of the specialist that he is more interested in his subject than he is in human nature, his very absorption restricts the range of his vision, and he finds it hard to view his speciality in its relation to the general work and purpose of the school, or to the capacities of the general run of pupils, or to the available time and skill of the ordinary teacher. He falls out of sympathy with the personal element in the problem, and expects too much.

The 'general' inspector, whose work it is to survey the school as a whole, is exposed to these temptations in nothing like the same degree, and may often interfere a great deal less in the teaching with greater benefit to the school. It is probably a mistake for a school to strain at high water mark all along the line: but the tendency of the 'group of specialists' inspection is inevitably towards this. An aggregate of separate minds cannot guide a school's progress so efficiently as a single all-round mind could. Each may patch up parts of the picture, but in so doing may produce disharmony: it requires the single artist to perfect the whole.

Not that specialist inspection should be altogether dispensed with; as part of a regular plan of complete investigation it is open to the defects, or charges, mentioned. But the occasional visit of a specialist, on invitation from the school authorities or from the district inspector with their consent, may be on a different footing. Where there is no intention of questioning the school's general ideals, but where instead the school itself feels the need of special help along some particular line the better to fulfil them, and where, in this case, the specialist is asked to advise on the conditions prescribed, he may do an invaluable service. The harm comes from imposition of advice or from alterations made from without, not from changes effected, with outside assistance, from within. The danger of group specialist inspections is that they tend to disregard the aims and character of the school as a school, and consider it too much as an aggregate of classrooms.

It is questionable too whether the kind of completeness of survey in which the periodical detailed inspection by a group of specialists results is an object worth attaining. The effect, upon the inspector's method, of re-iterated detailed inspection from school to school is almost inevitably to shift the attention to comparatively trivial details away from the larger questions which the practice of a more general view of a school would consider. As a means of incentive and guidance, there is more advantage in an inspection that considers and comprehends the school as a whole than in one which omits no item in the school's work, and it is completeness—or rather comprehensiveness—in the former sense that is to be aimed at. The practical question for the inspector is not so much the question

of each particular subject 'in what is the teaching above or below the mark and how may it be bettered' or of different school activities in isolation 'what is their value or how may they develop,' as of the question of the good that the school is doing as a whole, and along what lines is this school, given its type of pupil, its means and equipment and financial possibilities, its relation to its environment, its present general aims and character, and the abilities and characteristics and possibilities of the staff, along what lines is it to work out its future progress, to what side of its curriculum is it to give most attention, in what directions, generally, is it now to turn? The details should then be weighed and considered in their bearing on the practical reply to this general question, and not in abstract relation to separate ideals of their own; and it is possible that much detail may be safely left unconsidered by the inspector altogether.

Again, it is only if comprehensiveness, rather than a detailed thoroughness, in inspection is aimed at, that any useful continuity of policy can be secured. The inspector—as a guide-cannot safely do more than indicate general principles or main lines of development: to go into details is to usurp. without the necessary qualifications for doing so, the functions of the teachers, the headmaster or the governing board. Where inspections are at four or five-yearly intervals, therefore, their most useful concern is with the school's general progress, with the success of its efforts along lines taken up since the last visit or in consequence of it or already followed at the time. What has to be avoided is the fresh inquiry into detail irrespective of history or present context-continuity of inspection is a sine qua non of continuity in recommendations. It is thus very necessary for officers comparatively unacquainted with the school to consult its past records and reports, and to leave a free hand to the district inspector in the use he makes of their contributions when embodying them in the report. Perhaps it is not too much to say that the specialist would be more usefully considered as an assistant to the general inspector working under his counsel and control than as an independent critic of this or that feature in the school.

Another point to consider in regard to these 'full' inspections is the ordeal they inflict upon the teachers. In school inspection all consideration is due to the ordinary susceptibilities of the teachers; and—it may be added—to those of the pupils also. A formal 'with notice' four or five-yearly inspection by

a group of officers is a formidable matter, and, it must be admitted, often makes a teacher very nervous, and places good and conscientious teachers at a disadvantage. It is the less easy for even a sympathetic inspector to do justice to their work. Nervousness takes curiously deceptive forms, not unusually that of a brusque sharp or obtrusive manner, or of excessive talkativeness, or of the reverse, lapses of memory, and hesitations, and various eccentricities in behaviour. right to give this deficiency of the formal inspection its due place, because it is one of the considerations that must supply the answer to the question whether, even for a secondary school, a judgment based upon a series of casual visits, with occasional assistance from a specialist in this or that subject, is not likely to produce a fairer and more helpful report than the long and detailed report based upon a thorough investigation into every aspect of the chool's work, carreid out at a single inspection at infrequent intervals.

CHAPTER VII.

'The promotion of special movements in elementary education.

It is here proposed to allude to a number of movements in elementary education the promotion of which is at present a common policy amongst inspectors. These include—

- 1. The restoration of 'grind' in the classroom.
- 2. The encouragement of other than intellectual activity, including
- 3. The promotion of manual and outdoor pursuits.
- 4. The tendency to regard the individual rather than the class as the unit in education.
- 5. The promotion of greater elasticity and thoroughness in school organization.

During the thirty years preceding the last decade of the last century the 'faculty' pre-eminent in the class-room was the memory. The 'examination' system of inspection favoured this; and the memory had not yet been dethroued from its psychological pedestal. Intelligence, practical ability, selfreliance and resource, were at a discount-what was needed for success in the examination was a certain standard of attainment in the arts of reading, writing and arithmetic, and a certain amount of information in grammar, arithmetic, geography, object lessons, and other subjects. The gradual cessation of the examination, of the examination system of inspection, and of the grant system of payment for results, which marked the last decade of the nineteenth and early years of the twenticth century paralleled, as it also facilitated, a general endeavour amongst the Board's inspectors and other educationists, to free the school from traditional trammels and to introduce variety and independence in the curricula, and intelligence in the methods of teaching. The revolution in teaching was not effected all at once, but older teachers, who had resisted or disliked the customary method of mechanical drill, and younger teachers with new ideas from the training college, or not yet confirmed in the old ways, began to take advantage of the proffered freedom and to replace the discredited memory 'grind' with teaching that called for a general

exercise of intelligence. This was the epoch of the oral lesson, designed to evoke thought in the pupil by means of a succession of questions so graduated and ordered as to keep him, as it were, at a constant simmer of mental activity. Memory fell into discredit, and with it, by a false association, the individual continuous application to an uncongenial task that had been the mainstay of instruction for the public examination. The abandonment of the public examination, and the repudiation of the ancient shibboleths of instruction cast some things aside that were good along with the evil. Hard work on the part of the pupil fell out of favour—a false interpretation was made of the now fashionable doctrine of interest. In the old days school work had been repugnant; it was wrongly concluded that it was the work that caused the repugnance, and that therefore work should be more like play. It was above all to be interesting, to be liked. Whatever interest might have meant in theory the practice of interest was dangerously like the practiceof what was easy and pleasant. That pupils should like what they do slips readily in practice into pupils doing what they like. The disappearance of an external examination made in the same direction—the plea of 'intelligent' methods, cultivating mental activity and slighting mental contents-was easy to raise against old fashioned people who still held by the test of 'results'; and where there was no examination to fear. and no accumulation of successes to aspire to, the teaching tended to be slack and showy instead of strenuous and to the point. Discipline correspondingly weakened; success in the old days had depended on the maintenance of rigid discipline; rules were memorised at the point of the rod. There was no need for this now, and the new ideas of interest and intelligence gave mechanical discipline a bad name. Meantime a policy imposed for a while upon inspectors of 'masterful inactivity 'as an inspection method lent countenance to exhibition teaching that made no attempt to drive its lessons home.

The endeavours of the inspectorate at the present day—a process perhaps often half-conscious, but for that reason the more constant and 'natural'—are towards a restoration of the balance. Memory is being reinstated, the faults of looseness and inaccuracy are being remedied or exposed, and faith in steady hard work is reviving.

One finds, for example, a frequent advocacy of long arithmetic exercises on known rules, to impart or test the power of sheer continuous concentration as a complement to the short miscellaneous problems of the 'intelligence' era intended to

exercise the power of thought; in spelling there is an occasional belief in drill, provided the words are otherwise familiar, as a useful accessory to more incidental and casual methods of teaching orthography, and the idea that spelling doesn't matter, because it tests memory and not intelligence, once fashionable, is seldom expressed. In reading again the practice of silent study of a passage both for selecting the gist and for committing it to memory for reproduction, is a combination of thinking and memorising now in favour; and the days of mechanical 'reading aloud' have past. Many inspectors and experienced headmasters have deliberately championed the cause thoroughness and accuracy especially in mathematical workwhere inaccuracy most readily revenges itself in failure—and in written compositions, and, in some cases, in the various forms of handwork, because they have experienced the effects of the new intelligent régime, and have set themselves to counteract them. There is also a tendency to reinstate the three R's, to restore the old foundations of the instructional fabric, and to admit as much mechanical drill and practice as is necessary to inculcate habits of quick calculation, legible handwriting, correctly pronounced reading, and properly spelt composition. Advocates of such reforms are supported by voices outside the class-room-employers have been found to complain that youths enter their employ less careful, industrious and accurate at their work than in former years, and within the educational precincts themselves the ex-elementary pupil's lack of grounding in the elementary subjects is sometimes deprecated by the authorities of secondary schools and technical institutions.

If however there is a marked trend towards the reinstatement of memory and of carcful work, this must not be taken to imply a return to 'cram' in the sense of unintelligent memorising or mechanical drill. What strikes a visitor to elementary schools to-day in contrast with ten or fifteen years ago is the increased general activity of the pupils. The last quarter of a century has witnessed three stages of change. In the first stage there was a pronounced activity within a very narrow range, an activity that was neither wide nor deep, a concentration of a part of a person on a part of a job—a shallow if thorough learning. Then came a stage in which the thoroughness went and the shallowness lingered. The pupil's activity was replaced by the teacher's. It was the era of the supremacy of the oral lesson. The teacher was always teaching, and the pupil being taught. Meantime the range of the curriculum widened, and if activity

was less, activities were more. To-day a third stage is being: entered upon, in which with more and more varied activities, activity is deepening also. More of the pupil is being put into-his work, and he is doing work which appeals to more sides of him. In the first place in his more definitely 'intellectual' studies, more of his mind is being engaged; and, in the second, the school's activities are overflowing into more and more physical channels, or, to put it more accurately, in the attempt to bring the whole compass of the pupil within the school, his more physical capacities are coming into their own. That this ideal is as yet fully realised cannot be asserted, but a cross-section cut in English elementary education will reveal repeated examples of this main principle at work, none the less, indeed the more truly, exemplifying it because the instance is but dimly conscious of the principle behind it.

Take the teaching of geography as an illustration. In the first of the three stages suggested above the teaching of geography was confined to the memorising of isolated items of information-capes and rivers, and capital towns. In the second stage the teacher attempted to teach a geography lesson, with some attention to eause and effect, through a succession graduated questions, and a neat summary of matter upon the blackboard. The pupil's activity in this process was not intense-each step was so clearly indicated that hecould scareely help taking it, and he found his journey repeated for him in reduced scale at the end. In the third stage the oral lesson is only occasional; instead the pupil is set definitegeographical problems, which, with the aid of his own atlaswith maps showing the same regions in a series of different aspects, the 'physical feature' maps dominant—he sits at hisdesk and sets to thinking out for himself. The results of his investigation he may express as a written composition, or perhaps in the form of a graph or a drawing. In this case he is expected to think continuously unaided, instead of-as in the case of the oral lesson-being given a moment only to tender the reply to an easy question; for the question that involves no thinking is not worth asking. The 'mental' process implies: also thoughtful observation, some patient grouping or comparison of what he has observed, and the drawing of inferences; and this is followed by a eareful and orderly registration of hisresults. Here the activity is real; there is a continuous grappling with difficulties to compass a particular end. The pupil -not a fragment of him-is at definite work; his mind isabsorbed.

Another illustration may be taken from the teaching of reading, in which silent reading is now very generally practised. In the early stage the habit to be inculcated was that of mechanical reading aloud with sufficiently correct pronunciation; later the oral lesson again emphasised simple reading aloud, though it may have paid more attention to intelligent expression and to understanding of the matter read. third stage is being reached when the pupil is expected to treat the reading passage in the same way in which he will usually have to treat the written and the printed word in the ordinary business of life, namely, to understand it and to form some appreciation of the contents in their bearing on his life, whether immediate and practical, or permanent and spiritual. Pupils are now to be seen in schools seated at their desks reading and considéring a reading passage, finding out what it is all about, and afterwards either reproducing its meaning, or answering questions bearing upon it, solving problems put in connection with it, or carrying out processes of which the passage forms a description. The making of things from printed data, drawings to written descriptions, the unaided execution of geometrical constructions, are instances in point. In any case it is the interpretation, the carrying over into life and practice, of what is read, that involves a more real and searching mental activity on the part of the pupil than either the reading aloud as taught in the oral lesson or the mechanical correct pronunciation that was the staple feature of reading half a century ago.

Activity then is more real—more a genuine exercise of the whole person—than it was; and it is also, for the same reason, exhibited in more varied occupations. Physical activity is not excluded from its share in a pupil's class-room life.

The day is no longer a series of sedentary occupations punctuated with recesses. There is more stir and go in the proceedings. A pupil is less often writing, or listening, or reading, or doing sums. In his mathematical period it is no longer remarkable if he is measuring the playground, or estimating, on the spot, the practical requirements for laying out a patch in the school garden, or working out a graph of the month's weather phenomena from personal outdoor observations, or taking measurements for an exact comparison of the effects of different treatments upon some plant kept for the purpose. There is a limit, of course, to this kind of 'practical' work in mathematics; if carried to excess, it may easily retard or reduce the exercise of abstract reasoning. But it must not be assumed from these examples that the revolution towards

active' study has more than begun. Illustrations given here are culled at random from here and there—schools that have moved far in this direction are rare—and are meant to indicate the kind of thing that inspectors as a body are encouraging in the elementary schools, rather than an existing general practice. They represent a trend—an early and uneven advance.

Composition, similarly, more frequently entails 'active' preparation. The topics chosen in most schools are no longer abstract and remote, nor too 'old' for a child, but treat of matters known, and often occurring, to the children themselves. A child now describes what he does, or did, or means to do; what he sees and hears, and is occasionally indeed even put to doing and discovering something with a view to writing about it afterwards. Excursions—in tion with geography, or nature study, or perhaps history-are arranged, and a pupil has to express himself on the subject afterwards, not necessarily in writing; it may be in drawing, or modelling, or even manual construction. In any case the 'active' work or exercise is a part of a whole process which includes composition, which is often the end, in time order, but not always so-construction for instance, might follow, if a process, within the pupil's power of reproducing, were the subject of the composition, or some further experiment or observation, in the case of a phenomenon in nature study. What is of moment here is that composition is no longer a mere written reproduction of matter heard or read in class, or painfully evolved from the non-existent in the pupil's consciousness (as in the days of essays on 'courage ' or 'honesty is the best policy') but is repeatedly related to the actual and 'active' pursuits of the pupil, and, in fact, depends on such activities. On the mainly intellectual side of the curriculum the revolution towards a more varied and general activity has actually been carried further in the choice of composition topics than elsewhere. Experiments in 'activity' are naturally sometimes ill-advised. The 'dramatic' teaching of history, for instance, is occasionally a tedious attempt to connect 'activity' with a subject formerly entirely bookish. Whatever may be said of 'dramatized' history teaching at its best, it is not a method that can be safely made general. 'drama' bears little-often a farcical-resemblance to the real thing, and though it may assist the pupil to remember a few important points, less vividly impressed through reading or listening, it is a cumbersome way of doing so, and misleads as much as it informs the imagination of a child. A more

sensible co-relation of the history teaching with the active life of a pupil is that which relates it to local history and objects and places of interest, and sets him visiting, or gathering information about, them. Actual constructive work is also sometimes connected with history (e.g., the modelling, or wooden construction of a castle mont), but this has to be very carefully done from accurate knowledge if it is to be true to fact.

Apart from active work subordinate to mainly intellectual studies, occupations bulk larger in the curricula that are mainly 'active' in their character, that are exhibited, namely, in mainly physical performances. Dancing, for example, not the conventional 'dancing and deportment' of English drawing rooms and ladies' academics, but vigorous country dances and the more set 'morris' dances, marching to music, and even physical interpretation of musical rhythms. Singing has long been general both in boys' and girls' schools. There is a special staff inspector for school music. Physical drill and exercises also are universally practised, and a visitor to the elementary schools, who knew them a quarter of a century ago, would be struck by the interpenetration of the time-table with various kinds of bodily activity.

Part and parcel of this general movement towards greater and more varied activity in school life is the growing importance attached to what may be known as the 'practical' subjects; specifically 'domestic' subjects (laundry, cooking, housewifery, first aid) and needlework for girls, woodwork and other handicraft and gardening for boys; and 'nature study' and drawing for both sexes. These subjects not only themselves contribute largely to the 'active' character that is beginning to permente elementary school pursuits, but also influence in the same direction the teaching in other subjects in the curriculum. Thus arithmetic and composition-oral as well as written-can clearly be made to bear upon prices and processes and measurements in domestic subjects or gardening: and geography can be taught in its bearing upon soils, or articles in common use, or timbers or other material used in handicraft. All sorts of correlations can easily be set up in practice; but it must be admitted that there is room for much more co-ordination between the 'practical' and the 'intellectual' subjects than yet exists. Unfortunately, the principle of correlation was introduced too hastily into English education within the present century; its psychological basis was not understood by ordinary teachers who could yet readily suggest and invent all sorts of ways of relating one subject or one subject-branch to another in practice; correlation rapidly became a fashion, and the practice was carried, especially in the 'younger' classes, to unreasonable lengths; the teaching of one subject was warped from its proper function for the sake of correlation with another, or instruction in several subjects was disordered to establish connections between them. For this, and for other reasons, co-ordination in the teaching between different subjects is being treated a little shyly in the schools to-day, and it will take time to establish a sober equilibrium.

The growth of genuine, as distinct from artificial, activity in elementary schools, is when broadly considered only part of a more general movement which includes a changing attitude towards the individual pupil in a class. In the days of inspection by examination and of 'payment for results' the individual pupil was in a special sense the unit of instruction. The purpose of the teacher being to secure as many passes in the examination as possible, each pupil was looked upon in the light of a possible pass, and so as a grant earning agent. means were adapted to this strictly practical aim. The good pupils were comparatively neglected—they would pass in any case; the medium pupils had a fair share of attention, but the weak pupils had most. But the point is that the pupils were not considered for their own sakes, but as pawns in a game, or as possible pennies in a pound. With the passing of the old order the 'level class' still continued to persist as the aim in school organization and teaching-the class became the unit of instruction rather than the individual pupil. A class had to be even, if it was to be economically taught, or else the instruction that suited one end of it would be wasted on the other-The idea was to carry the pupils along evenly from the beginning to the end of the year, and the ideal was to present the lot of them as ready for promotion. It may be observed that two causes contributed towards this policy, firstly, the practice of promotion by age, and secondly, the fetish of oral teaching. Promotion by age is a survival from 'examination' dayswhen standards and ages went together-and is not yet extinct; and it is clear that when pupils 'go up' every year, the only way of aligning your class for teaching is not to consider the needs or capacities of each individual pupil, and supply or exercise these, but to maintain an even dressing at all costs-at the cost, that is, of depressing the bright, and overworking the dull. Similarly, oral teaching-or rather the oral lesson-is most successful when the class before the

teacher is fairly even; otherwise, he either bores the clever with easy, or baulks the stupid, with difficult, questioning, or else attempts to carry on two lessons at the same time. But at last the stage is being reached when the individual pupil is coming into his own, and when the class exists for the pupil, not the pupil for the class. There are several indications of this tendency. The idea is spreading of allowing pupils increasing freedom to choose, within limits, their own particular pieces of work. Instances could be multiplied—it is common for children to select from a given list their favourite pieces of poetry for memorising or recitation. In drawing or 'art' subjects, so far as the time-table and the scope of the teacher's knowledge permits, individual pupils sometimes take up special lines, specializing, for instance, in design, or pen and ink work, or some form of colour-work. In nature study, though there are drawbacks to too ambitious or expanded courses, it is always possible for a pupil to collect heetles rather than butterflies, or to study plants from different points of view; one pupil -or, group of pupils-may prefer to attempt artistic representations of natural subjects, another may be more interested in the 'whys' and 'wherefores' and 'hows'-the scientific aspect—of the subject. The tendency is, within particular limits, to admit individual preferences and aptitudes, and not to drive all the pupils along the same track. Perhaps the handicraft on the boys' side is the subject in which the adaptation to individual taste and capacity can be most varied. Here, in classes whose limit of number does not officially exceed twenty, the instructor's attention is largely individual, and, in every centre of handwork that I visited, the pupils were allowed to choose any special article they wished to make, so long as it did not involve operations clearly beyond their powers. cles useful in the home, or required in the centre itself, playthings, and ingenious contrivances (often of the 'puzzle' nature); and sometimes material representations of botanical objects or geographical phenomena, or simple meteorological instruments, are amongst those chosen, according to the taste of the pupil, guided partly by the tradition of the class. He has also-a movement stimulated by the war-some freedom of choice in the material he will use, and in the different means of adapting it to its purpose, and he is often encouraged to turn to good use objects commonly discarded—old tins, cardboard boxes, broken articles of various kinds, packing cases, and so on: a tin cup emerges from a battered jam tin, and a flower pot out of a cardboard cream jar.

The handwork also illustrates another movement, in which the consideration of the individual rather than the class is evinced. The pupils are allowed freedom of individual progress—the good pupil is not retarded nor the weak pupil forced ahead. The rate of progress, as the choice of work, is largely individual. This movement towards the greatest possible consideration of the individual's needs and aptitudes is expressing itself in various changes that are beginning in the internal organisation of schools, and the matter is of sufficient general importance to deserve some separate exposition.

Organisation and Individuality.

A main purpose in school organisation is to ensure for each pupil instruction in those subjects, and in that subject-matter in each subject, and according to those methods, which suit his capacity and aptitudes at the time and best promote his future development. The problem indeed is how to make the best of every pupil, backward, mediocre, bright, and of different tastes and temperaments. Of course this can only be done by adapting his work to each child, and the elementary school need no longer be turned from this object by fear of public examination, or by any rigid rules of promotion and classification solely by age. A type of organisation is thus in demand which shall assign each pupil the work for which he is fit, and keep him progressing to higher and harder studies, without break of syllabus, as he becomes ready for them. The need for greater elasticity and complexity of system to facilitate this process is now beginning to be realised, and inspectors in their different areas are generally, and more or less systematically, engaged in attempting to solve the problem.

One method by which, within his class, a pupil's special interests are being more considered has already been mentioned, viz., by allowing him, as far as practicable, latitude to choose his particular bit of work in the general scheme for the class.

But other methods are needed—to supplement this. Classes are big, running even up to sixty pupils—and in ordinary classification no teacher can show much variety of occupation or of standard over so large an area without muddle and inefficient supervision. Can the classes then be subdivided for separate treatment? or, if not, can steps be taken to prevent too great a variety of ability or attainment in any one class, so that individual treatment need be less various? One practical reply to the second question lies in re-classification for different

subjects. The custom in elementary schools has been to keep pupils in the same class for all subjects—a simple system by which with an assignment of teachers to classes rather than tosubjects the framing of time-tables is child's play. But it has the disadvantage of retarding a pupil's progress in his best subjects till he has 'caught up' in others. Yet it is just in excellence in any special lines that a pupil's individuality is expressed, and the effect of this uniform system of classification is thus to suppress, rather than to cycke, individual talent. Mathematical ability, and artistic talent, are often peculiarly individual and separate, and experience is abundantly showing that pupils backward in bookwork often find their true bent when they take up the more 'practical' subjects-handicraft again and again is proving the salvation of the backward scholar. Though there is as yet no general move towards 'reclassification,' enterprise in this direction is being steadily encouraged. An experiment in 'practical' education has for example been recently tried in the Lindsey division of Lincolnshire and in the South-West division, according to which (in the latter for example) some twenty schools, varying in numberfrom thirty to over two hundred pupils, have set aside three afternoons weekly for 'practical' subjects, chosen, for boys, from amongst the following: gardening, woodwork, cardboard modelling, practical arithmetic, nature study, drawing, beekeeping and matting; and for girls from needlework, cookery. housecraft, laundrywork, nature study and flower gardening, dressmaking and rug-and mat-making; and for younger children from paper-folding, modelling in clay and cardboard, practical measuring and drawing, raffia and basketwork. advantage of simultaneous practical work for the whole school is that it makes possible a complete re-classification in those subjects, so that a pupil in the second or third class in hisgeneral school work may be in, say, the first or fourth section or class for practical pursuits; and his promotion in these is independent of his progress elsewhere. The system is the less practicable in large schools, where special rooms for some forms of practical work might thus be crowded at the same time, but in smaller schools-especially in rural schools with space for gardening-it is easily worked; and is being favourably reported upon by the teachers, as fostering resourcefulness and self-reliance and general intelligence, and frequently discovering special aptitudes in the otherwise dull pupil.

There is also a fairly general advocacy of a policy of 'sectioning' within classes. The class teacher subdivides his class

into two—sometimes three—groups according to their general progress, and so arranges his time-table that oral teaching falls to one group only at a time. This may be done all the way up the school. Thus in different classes some forms of handwork for one group may sychronise with a reading lesson for another, an arithmetic oral lesson with drawing and writing, transcription with a nature lesson, and so on. And in higher classes the better pupils may study a reading passage quietly, or make notes upon what they have read, while another group is being taken orally in reading; and again in arithmetic one group may be left to do without explanation exercises that with another require oral preparation by the teacher, or may be set harder work to grapple with alone. A growing confidence in pupils' independent study facilitates the arranging of timetables on these lines.

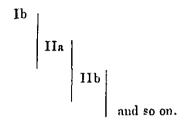
It will be gathered that this plan of sectioning implies a corresponding differentiation in syllabuses. In some schools this is not explicitly recognised, the 'better' section merely doing harder or more detailed or less assisted work on a common syllabus, that is to say, within the same range of topics. advance is then 'concentric' rather than continuous, or in the mere capacity for working the same course alone. idea is spreading of making explicit differences in the syllabuses for the class sections, the different groups covering rather different ground. As soon, however, as this step is taken, the class in effect becomes two classes, one higher and the other If this movement is carried up the school the number of school classes has practically been doubled. This raises the questions of the frequency of promotion, and of co-ordination of syllabuses within and between the classes. Attempts are being made to answer these questions.

As regards promotions, the prevailing practice of annual promotion is a survival from the 'mechanical' era of last century when pupils were promoted yearly simply according to their age. In those days a pupil endured the whole school course to the end, whether he was fit for it or not, or till he reached the minimum age of exemption. The main general change that has taken place in the present century has been in the direction of retarding promotion for the unfit; acceleration has been less frequent. At the same time the syllabuses have also usually remained fixed courses for a year's work in each class. The movement already indicated towards a better adjustment of the courses to the pupil's requirements, has however in several schools been carried further, and the rate of promotion has

been varied in accordance. The plan is not uncommon, for instance, of supplementing a 'double-class' system with half-yearly syllabuses, often overlapping into the syllabuses for the class above and the class below. A kind of zigzag organisation results which may be graphically represented as follows:—

Syllabus.

Class I a



On this principle a sharp pupil may pass from class Ia to class IIa after six months without dislocation of work, while a dull pupil may spend a whole year in Ia and an ordinary pupil may complete the courses of Ia and Ib in a year. The syllabus for Ib will in this case be not necessarily a mere repetition of the last half of Ia and the first half of IIa syllabus, but might both recapitulate and cover more difficult parts of previous ground. In the abstract this scheme provides for retardation or acceleration of promotion by six-monthly considerations of each pupil's case, and thus each pupil may advance unevenly up the school. In practice this plan is most feasible in schools of some three hundred to four hundred pupils in which six (or seven) standards can thus be duplicated without necessitating an excessive staff.

The tendency in the past in schools of this or larger size, has been to overweight the school at the bottom by duplicating lower classes while sometimes actually combining classes at the top.

Thus the number in schools of from four to five hundred pupils entail their division into nine, ten or eleven classes, against an average school life—on an annual promotion basis—of seven years. In those schools it was usual to have 'double' classes at the bottom, and on the old system of fixed syllabuses for the seven standards (or years of school life) it was not possible to find room in the single upper classes for all the pupils coming up from the double classes below, except by

accelerating the flow of promotion above. This subordinates the interests of the pupil to the convenience of a rigid system of classification. Amongst other improvements upon this organisation is that, obtaining in one school, of deserting the annual promotion principle altogether, and dividing the school into nine continuous classes with eight-monthly or ninemonthly syllabuses. In this way a pupil regularly promoted ascends the scale in six or seven years.

In a group of schools with A and B sections, the syllabuses for the B section covered the same series of main topics as in the A section, but eliminated details and gave a simpler treatment all through. The B classes too were rather smaller, and individuals received more separate assistance. They worked more slowly, but it did not follow that they were otherwise mentally inferior. In many cases it was found that they caught up their fellows in higher classes and proved as capable in the end.

Such experiments in classification suffice to illustrate oneattempt that is now being made in English elementary education so to organise the school as to consider the needs of the individual. The difficulty in schools in which each teacher may stand for thirty to forty pupils, and a class may contain as many as sixty, is to provide for children of very varying kinds and rates of mental development. Some children areprecocious, some are dull all through, some lag early and then spurt ahead. Some think slowly, but correctly; others quickly and correctly, and some, again, quickly but erratically, and some are both dull and slow. Different types of mentality require careful adjustment both of rates of promotion and of mental treatment and fare. The schemes alluded to above merely indicate the first step in a tentative advance towards a greater elasticity of organisation in English elementary schools, and will no doubt lead later to further and more variable methods of providing for the fuller development of each individual child.

What has been attempted in this chapter is to give the impression produced on an outside observer introduced into English elementary education at a moment of transition, who accordingly is concerned to discover what the chief movements at the moment are, and to exhibit them in as clear a light as possible. And his concern is more with a study of what the more advanced educationalists are attempting to do, than with what is the present condition of the average schools. An in-

spector is a dealer in futures; and therefore the several illustrations in this report though taken from actual practice must not be interpreted as a picture of ordinary English elementary education as it is, but rather of English elementary education as it is becoming, or of conditions which inspectors as a body -along with the better teachers and other educationists-are attempting to make more general in the schools. The changes here indicated are, accordingly, as yet in various early stages, and have still to mature. It is the work of the inspectorate to survey each stage in a movement, to observe what is already being done here and there by teachers who have grasped the new ideas, and to spread them in their practical application up and down the country. The inspector does not in practice so much originate as interpret or communicate: he guides rather than leads, or, if he leads, it is more usually than otherwise by disseminating the teaching of other leaders. At the same time he must exercise on all new enthusiasms the control of sober commonsense.

It is of interest in this connection to instance from a conference held this year of the women inspectorate, the constant recurrence of the idea of promoting individual activity, and activities appropriate to the individual, in the minds of the speakers, and the actual position of the schools as gathered from the views expressed by members of the Conference. very fact that no item in the agenda dealt specifically with this point makes the dominance of the idea of individual activity the more significant. Three of the twelve topics for discussion reflect the idea directly-'Is there any increase in the selfgoverning idea in elementary schools?' and the questions of 'Private study in the Elementary School,' and of 'Modifications of the curriculum in higher classes of Public Elementary Schools with regard to special needs of girls in after life.' In the discussion on the last topic, for example, the present position of the schools in relation to this aspect of the individualistic movement is indicated. "It is found that while in many districts there was little or nothing to report, some attempts are being made to cope with the problems mentioned.....and that the results of those attempts are very promising. ities (that is, the local bodies in charge of education) had got to the stage of asking 'What do the girls want?' There was found to be 'a very considerable increase in the number of school leaving classes for backward girls who instead of remaining in the low standards for which their attainments qualify them, are transferred at twelve or twelve and a half to special

classes which devote much time to domestic subjects, needlework, laundrywork, and baby care. Many teachers also take considerable trouble to find employment for their old girls in businesses of various sorts and to give them special coaching for the purpose before leaving school.' Again, several speakers remarked that the elder girls were not given enough responsibility and that they had little or no opportunity of exercising a choice On the other hand instances were given of schools where the elder girls are expected to arrange their own work within certain limits. They are not treated as a class but as There is preparation set in every subject; it is individuals. the business of each girl to fit the preparation into the time at Books are on the table for them to fetch as they her disposal. Bells are not required, the girls moving to the require them. time-table of their own accord. Other schools were mentioned which gave some choice in hobbies, by setting apart one afternoon a week on which a girl could choose her own occupation, but having chosen she was bound to stick to it for three months. The general opinion was however that hobbies were much more encouraged in boys' schools than in girls ".....In another case the girls were made responsible for the order and cleanliness of the school, and took it in turns to look after the babies and to take charge of the school dinner. A suggestion was made "that in a country district more use might be made of the children's natural love of collecting by developing the nature study and geography on lines of local interest and encouraging them to collect 'intelligently.'' The ideas of adaptation of work to individual pupil's requirements, and of encouraging individual initiative, clearly pervade the whole discussion; and, apart from any formulated conclusions in which the conference might culminate, the various members who attended must have left for their respective areas with new applications of a main principle to attempt to communicate to such schools as seemed ready to receive them.

The idea of the preciousness of individuality, now becoming current in these elementary schools, owes, if not its birth, at any rate its present prominence, largely to a retired Chief inspector of the elementary schools who in his books 'What is and What Might be' and 'In Defence of What Might be,' has treated in terms of education the philosophical doctrines of 'self-realisation' and 'self-expression.' The idea of self-expression is a good deal in the air in elementary schools, and though the essence of Mr. Holmes' teaching has not been generally understood, and 'self-expression' has often become a con-

venient cover for inaccurate, careless, or irregular work, the main influence of the present vogue of individuality appears to be wholesome. It is noticeable that interpretations of the same ideas by Dr. Montessori, their missionary in the infant classroom, have not found general favour in English schools, or, at any rate, with English educated opinion as a whole, chiefly because by the time they reached England, they were seen to contain little or nothing new, and the doctrine of self-expression is by this time, through its inevitable abuse, being treated with caution.

There is also one gap which the movement towards ' individuality' in the schools leaves unfilled. The stress upon one aspect of school activity is diverting, or inhibiting attention from another. The complementary movement-if one may so call it-of co-operative or group action in the schools awaits its preacher and its missionary. The idea of co-operative study or occupation—though instances may be observed at haphazard-has not yet taken root. Where co-operation occurs, it is not so much in conscious obedience to the idea, as because it happens to be the obvious means of undertaking the work in hand. Co-operation has not been raised to the dignity In the case of handicraft, for example, where a of a principle. big article involving several operations has to be made, it is natural to call upon several pupils to contribute; one makes one table leg, another another and a third the flat top, and so And in such a case a teacher here and there has begun to recognise the educational, as well as practical, advantages in this group work—one result can be measured against another, accuracy is tested, if the different parts of the structure are to fit and both legs (for example) to be true to a common measure; and the pupils learn from one another by consulting over common difficulties; they 'put their heads together' and they grow to realise the practical necessity of compromise. But no one has yet, so far as I could gather or noticed, deliberately attempted to spread the 'co-operative' idea in instruction in the schools. Instances were lacking in which the pupils in an advanced class take up different lines in their history passage, one group trying, for example, to infer from his conduct the character of some historical personage, another group looking for exceptions to a trait suggested by the teacher, and a third considering how some other hero of history would have acted in the same circumstances.

There is scope in schools for much combination work of this kind. In regard to compositions, though subjects chosen now-

a days are generally suitable to the age and experience of the pupils, the idea of setting different sections to treat different aspects of the same topic, and so contribute to a common product of the whole class, is as yet absent. Yet with the present attention to common practical and outdoor occupations, and their co-ordination with work in composition, the ground is obviously ready for this next step. One group of pupils might consider the differences between similar plants, another their similarities, a third could compare their general characteristics with plants of another species. The total would be a body of information valuable and available to all. The different contributions as they are made might supply a useful exercise in oral composition for the group, and the whole the subject of written or oral work for the class. Geography, mathematics, even English reading or grammar, and indeed every subject in the school curriculum is susceptible of some application of the co-operative principle. Its scope need not be confined to the 'practical' occupations only, in which it at present figures as an incidental help. A movement to supplement the cult of 'individuality' with the cult of 'association' would add a power in education that made for a fuller and deeper individuality in itself-for men are - not made by developing their powers in isolation, but they are themselves best developed by constant interplay with the personal forces around them. If it is the business of a national system of education to make good the national defects, yet it is the lack, not of individual initiative, but of organised co-operation, that is being generally deplored in English life to-day. The question awaits an answer whether English public education has not its bias on the wrong side.

CHAPTER VIII.

Inspection and Internal examinations.

A.

As mentioned in the chapter on Inspecting Procedure the ordinary internal examinations held periodically in elementary schools do not receive as an index of the school's condition the attention from inspectors to which their importance entitles them. The reasons for this neglect, and for the attitude of inspectors towards these examinations, are worth some separate consideration.

Under favourable conditions periodical tests of classwork can convey trustworthy indications of the state and management of a school, thus serving to supplement the means at an inspector's disposal for estimating a school's worth. worked answer papers of the pupils should indicate in any subject their standard of attainment, the intelligence with which they approach their subject, and—to some extent—the methods employed in teaching it. They may help towards determining the suitability of the syllabus-whether the course is rightly proportioned, whether it is too hard or too easy, too long or too short; and modifications of the syllabus may be based on information thus gained. The examination results can assist an inspector in forming a judgment on the success of the teaching, though they cannot of course acquaint him with the particular circumstances affecting that success, and so are a fallible sole instrument for measuring the capacity or industry of the teacher. The fairness and the standards of the marking can witness to the headmaster's interest and intelligence in direction, and the questions, by their quality and selection, to the instructional ideals, of the school.

If however the examination is to serve these purposes, certain conditions must be present. The examination must be recognised as a serious institution. Where it is generally lightly treated, and does not claim equal thought and care with other elements in a school's general conduct—the classification, the apportioning of the work, the time-table, the syllabuses, and the daily routine of teaching—then an investigation of it, for evidences of the headmaster's general aims and direction, is off the point; where the questions are framed to

exhibit what a pupil does, rather than to test what he should, know, where the marking is unduly liberal, or where the control of the class when under examination is careless, then the matter and the marking of the papers cease to give a measure of a pupil's real progress, or of the efficacy of the teaching, or of the adequacy of the syllabus.

But unfortunately these examinations in English elementary schools seem to have been involved in a vicious circle. Inspectors have not taken them as serious aids to school evaluation because they have not been so taken in the schools themselves, and the schools have not taken them seriously when they have not been expected to do so. A judgment upon the conduct of the examinations has not contributed its due share to the inspector's judgment upon the school as a whole. The historical fact is that with the abolition of the inspector's public examination in the nineties the examination tradition persisted in the shape of internal examinations conducted, more or less formally, by the head teacher. But it was the ghost of the real thing: the motive-material rewards-to make it an efficient and substantial school fact had disappeared. One extreme was exchanged for another—the public examination had been the all-in-all of school endeavour, the internal examination was likely to lapse into a casual incident of school routine. This danger indeed did not go unnoticed by the Department at Whitehall, and in default of the written evidence of the school's progress shown by the public examination the teachers were encouraged to maintain, and the inspectors to take advantage of, a number of records and registers of the school's doings-special care was to be taken over time-tables, and syllabuses, and progress records and reports; and from time to time. though the Code mostly was silent, the 'Suggestions for the consideration of Teachers ' made various recommendations with regard to periodical examinations within the school. Syllabuses and time-tables are to-day regularly supervised—and signed—by both the local and the Board's educational officers (and this is usually, though not universally, done on the spot where the circumstances can be ascertained), but as yet there has been no methodical or sustained effort to reform the examinations or to control them; their possibilities both as an aid in inspection and as a piece of school machinery, remain unexploited, and though the head teachers of some larger schools in particular have found in well conducted examinations an expedient for measuring progress where others were beyond their compass, generally speaking the internal examination has

suffered from neglect. In certain areas however fresh interest has been aroused in the subject, and a movement towards reinstating the examination may be anticipated. At any rate separate investigations in two large and important divisions have revealed present deficiencies, a prelude to remedy; and, as internal examinations take a prominent place in the economy of secondary schools in India as a means for determining pupil's promotions, these deficiencies may repay the practical educationist's consideration.

В.

As a rule the examinations have been held too frequently. It is a question what reasonable object can be served, at least in ordinary eircumstances, by holding formal examinations more than twice a year, though a class teacher may, and usually does, conduct more frequent informal tests of his own; indeed, he may be said to be testing the pupil's retention and intelligence all along. On the other hand formal examinations can easily be too frequent to be really well conducted or checked by the head teacher, consistently with the satisfactory performance of his many other duties; and it may be at once more practicable and more beneficial to concentrate upon one or two really scarching and comprehensive tests, than to spend a greater aggregate of time over a number of less thorough examina-The opinion is expressed for example that where a head teacher is in touch with his school and is constantly visiting the classes, one formal examination in the year should suffice; and it is probable that the London County Councilthe most important local authority in England-will reduce the obligatory number to one. Time has been wasted also through superfluous sub-divisions of subjects (separate tests being given, for example, in writing, spelling, composition, literature, and grammar, or, in arithmetic, in 'sums,' mental arithmetic, practical arithmetic, mensuration, algebra. and even 'figuring'), and through allowing excessive time for doing the papers, and again by the headmaster's doing too much of the actual examining himself.

Though separate papers have been needlessly set upon subdivisions of subjects, the seope of the examination may at the same time be too narrow. The tendency has been to limit it to the three 'R's' (in accordance with the tradition of the 'public' examination), to exclude from test the 'practical' subjects—handwork, needlework, and domestic subjects, not open to expeditious or written examination—and to neglect (namely, in science or geography) supplementing written with oral or practical tests. Where the scope is confined, and promotions of pupils or judgments upon the teacher's work are made dependent upon the evidence of the examination, subjects not examined upon are apt to be neglected in the teaching, and it is plain generally that if a subject deserves teaching at all, to omit it from examination is to make the measure of the pupil's intellectual progress untrustworthy because incomplete.

A common defect in examination papers is in the choice of Proficiency in the art of setting examination papers is not lightly acquired—the questions have to be so framed, distributed and proportioned that memory, intelligence, and the power of application should all be exercised, there shall be scope for the weaker and chances for the stronger pupils, the foundations of the work as well as the nearer syllabus shall be included, and the syllabus as a whole shall be fairly evenly covered, and essentials shall be treated rather than mere details (the mere cramming of lists, rules, exceptions, synopses, tables, and outlines should not be called for); the paper shall require neither thoughtless haste nor long reflection for its complete answering, and the meaning of the questions shall be unmistakable. It appears that a good deal of care is often taken over the choice of questions, and it is quite likely that teachers in elementary schools in daily touch with children should know better what can be expected of them and how to frame questions to their requirements than more detached examiners examining over a wide area. Good head teachersespecially in large schools-often frame questions with the deliberate aim of influencing the teaching.

If the marks allotted on the worked examination papers are of themselves to assist an inspector towards estimating the work of the pupils, and indirectly the efficacy of the teaching, they should be awarded on an even scale from school to school, the marking should bear a clear relation to the merits of the papers, and the maxima possible to the value of the subjects in the curriculum. Investigation shows however that the standards have been irregular, haphazard, and as a rule unreasonably low, in some schools large numbers of pupils being given full, and very few less than half, marks. A flat rate of maxima is also common, so that an inspector has no indication of the relative importance attached in a school to the different subjects.

The conditions under which the papers are answered have often been neither strict nor definite. Where pupils are allowed to collaborate, or to mingle during recesses before finishing a paper, or have the questions 'explained' to them beforehand, or are allowed unlimited time for their answers, the examination loses in practical value. With this kind of carelessness may be reckoned—for the exaggerated appearance of knowledge it produces—the actual preparation of pupils for the questions to be set or the confining of the questions to what the pupils have learnt most recently.

The deficiencies enumerated above as vitiating the internal examinations are not by any means universal. There is more individuality, and therefore greater variety of practice, in English than in Indan schools of the same grade. In some cases the internal examinations are carefully managed and adapted to useful purposes. The 'placing' of the pupil, for example, may depend, not only on his marks for written papers, but on such evidence of his industry and ability as is shown in his exercise books for the past period, or in records-monthly or weekly-kept by the teacher of the progress and behaviour of each pupil in his class. Interesting if debatable departures from common practice are those of examining a class by sample, or of excluding from test pupils who have no chance of promotion, of supplementing the ordinary examination with a 'silent study' exercise, in which for example the children in a top class are given three weeks and the use of any books or material they wish, for producing a full account of some country in Europe. There are instances of special tests of intelligent silent reading (e.g., in the supplying of headings to paragraphs or the making of a mouse trap to directions), of special 'speed' tests in arithmetic, or of the use of atlases for solving problems in geography.

As regards delegation of authority in setting question papers, a headmaster may set one half of a paper and the class teacher the other, or teachers set papers for one another under his general check, or—a plan worth remembering—the papers for one class may be entrusted to the teacher of the class next above, into which the promoted pupils will be admitted. Some head teachers make good use of reports to parents, accompanying a statement of marks, and the following 'personal' note to the parent is said to have had good results. 'Will you please continue to do your best for your boy's welfare at school by sending him regularly and properly, by watching his progress, and taking an interest in his school life and work? Suggestions from you will be welcomed. You may call and

see the time-table and your boy's work at any time by giving previous notice. Our aim is to lead your child, as far as we can, to make the best of himself and his opportunities. We ask for your earnest co-operation to make the life of the school as helpful as possible.'

Any measure that may lead parents in India to regard an Anglo-Vernacular school as something more than a manufactory of matriculates is worth a trial.

C.

Some of the defects mentioned in the conduct of examinations have been due not merely to a general carelessness but rather to the diversion of the examination from other functions to that of basing on it a more or less formal report of the class's work and so of the teacher's success. The public examination ceased in 1895, and in the following years inspectors were advised officially that the worked examination papers of the pupils would 'afford further material for forming an opinion of the school,' and in the 'Suggestions' of 1905, the head teacher is encouraged 'to keep a record book containing brief entries of the quality of the work done throughout the school as tested by periodical examinations.' The head teacher's report, with the question papers and written answers, was to be kept for the information of the inspector. Where internal school examinations are regarded as primarily tests of the class teacher and not of the class, and the reports of the head teacher upon them as reports on the class teacher's capacity, and not upon the work done by the pupils, the examination is influenced accordingly. Easy questioning, high marking, special preparation, careless supervision, may be some of the natural results of a desire not to let the examination spoil the teacher's record. And the head teacher's reports taken on too uniformly favourable a colouring. The association with the internal examination of reports on the class's progress defeats in this case its own object, for the examination results on which they are based are misleading. 'The reports of the head teacher,' savs a recent memorandum on the subject, 'if they are to be really useful, should indicate how far the schemes of instruction are working out successfully in practice, and should also suggest to the class-teacher possible modifications of method and aim or a new distribution of emphasis on certain points.' These purposes clearly cannot be secured except by frank statement and discussion of the subjects or parts of subjects in which

the work of the class has fallen below a reasonably high standard. It was, however, extremely rare to find reports which answer in any sense to this description. Sometimes they consisted of letters only:—

- V. G. (Arithmetic and mental.)
- V. G. Reading, composition, spelling, drawing.
- V. F. Handwriting.
- F. Grammar.

more commonly of a few words of commendation of the class-teacher or a statement expressing satisfaction at the work done:—

- 'A continues as an untiring, conscientious and intelligent worker, full of energy and zeal for the good of the children in every respect.'
- 'B has done brilliantly. There is no weak spot at all in the class.'
- 'C has carried on the work most successfully with the happiest results.'
- 'D is a very conscientious, hardworking, methodical modern teacher, ever seeking for improved methods of instruction, and the work of the class is in a very satisfactory state. The Composition, Handwriting, arrangement and neatness of all paper work have greatly improved, and special praise is due to the general intelligence of the children.'
- 'While the praise of the class-teacher's efforts was often deserved, study of the examination papers frequently showed various defects in the children's work which called for the attention of the head teacher and his staff, with a view to their improvement. Yet it was rare to find such points mentioned in the reports, and it is not going too far to say that in many schools it would be better to have no reports at all than those written at present. They had little or no relation to the work actually done by the children, and for that reason were in no sense the means they should be of raising it to a higher level of efficiency.'

The following is an instance of a more discriminating type of comment where the educational purpose of the report had been kept in view:—

'In the old drill subjects of arithmetic and spelling we are both disappointed, and I am convinced that we cannot reasonally expect the class to cover our present arithmetic

Syllabus in the short time we allot to it. Next term we are easing it.'

'But I am not sure whether A has not fallen into the clever teacher's fault of relying too much on clever teaching and too little on persistent grind which alone can secure accurate arithmetic and correct spelling. It will be worth while to try a judicious mixture of the two.'

Other purposes that the internal examination can serve have been fairly generally ignored—in indicating the success of the pupils and the appropriateness of the syllabus, in helping to determine pupil's promotions, or in providing a stimulus in their work. For the last named purpose the class marks should be made known generally and as soon as possible. Cases in which they were not available till the pupils had left the class, or were not published at all, or in which the worked papers were never returned or shown to them, illustrate the neglect of this possible use.

D.

If the examination in England has been abused through becoming a test of the class teacher rather than of the class, the question is whether in India it does not suffer equally through being regarded too exclusively as a piece of machinery for determining pupils' promotions. The yearly promotion examination is a substantial fact in Indian schools, which claims no small share of the inspector's time and attention, but mainly for assuring its promotion value. There are also quarterly or 'house' examinations—making three or four examinations in the year—the results of which sometimes modify or check the findings of the promotion tests.

The conclusion is not to be drawn from the English experience that the questions, the worked papers, and the marking in these examinations cannot or should not assist an inspecting officer in his estimate of the conduct of the school as a whole or of the teaching in the respective classes; the warning to be gathered from both the English and the Indian experience is not against taking advantage of this particular institution to add to one's knowledge of the school and not against using it as one means of determining the promotion of pupils—it is rather against sacrificing to these or other subsidiary objects the prime purpose of testing the progress of the class. This is, and should remain, the most generally useful function of the inter-

nal examination, which may serve other purposes only provided it be not spoilt for this.

If evils follow, where the mere examination results are made a measure of a teacher's capacity, without considering the particular circumstances or giving due credit to qualities not connected with examinations, the consequences of using the examination simply—or mainly—as a machinery for promotion may be no less unfortunate. The questions, the marking, the preparation of the pupils, the details of the examination day, may be so ordered as to ensure a fair pass percentage, and these and other consequences can best be anticipated not by checking or controlling in the examination merely its efficiency for promotions, but by carefully investigating-at ordinary inspections or otherwise-its adequacy for its prime purpose, and by deliberately giving the examination its due importance in the general conduct of the school. This reinstatement effected, it is open to consider the subsidiary uses to which the examination may be put.

For their function as measuring the pupil's progress it may be asked for example whether in Indian schools formal examinations are not held too frequently, whether enough care is taken in choosing questions, in maintaining a proper standard in these and in the marking, in proportioning the maxima amongst the various papers, whether more account could not be taken of other than the day's examination records and of other than merc intellectual or paper proficiency; whether the subjects are too subdivided or whether each is given its due place, whether the papers are too long or too short, and lastly how much freedom can safely be allowed headmasters in arranging all such details for themselves. For after all a question of wide importance is not merely that of the efficiency of the examination for its immediate purpose, but also that of the degree to which immediate efficiency can be sacrificed in the future interests of education as a whole. For school authorities, like others, can only be expected to learn from experience if they are also permitted to make mistakes.

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PREFACE

THE training of secondary teachers has already formed the subject of a previous Occasional Report issued from the It dealt mainly with the systems of training followed in the United Kingdom, in Prussia and in America. The concluding portion was concerned with training in Bombay. In view of the importance of the subject no apology is required for a second volume especially as the previous report was published nine years ago, dealt mainly with the systems of other countries and did not touch upon the training of primary teachers. The Government of India have recently emphasised the necessity of preparation for the teaching profession and have made a recurring grant from imperial funds amounting to £20,000 annually. The succeeding pages written by Mr. H. S. Duncan and Mr. A. H. Mackenzie give a description of the systems pursued in Madras and in the United It is hoped that the volume may prove of interest and value to workers on the same subject in other provinces.

2. The fact that Madras and the United Provinces have been selected is not to be interpreted as warranting any assumption that the facilities for the training of teachers which exist elsewhere are not worth description. The selection was influenced mainly by the desire to present a description of what is being done in two provinces where general conditions widely differ, and the systems prevalent in which contain some suggestive features. Among minor reasons it may be pointed out that the system of training in Madras is long established and has undoubtedly had highly beneficial results and that in the United Provinces there has recently been a wide expansion of a form of preparation of primary teachers not dissimilar from a form which has been discarded in certain parts of India but which if it can be successfully/pursued undoubtedly offers a solution of the difficulty involved in providing an adequate supply of trained instructors.

H. SHARP,

Educational Commissioner with the Government of India.

THE TRAINING OF SECONDARY TEACHERS IN THE MADRAS PRESIDENCY.

Introduction.

In the Madras Presidency there are two training colleges for graduate teachers—one at Saidapet and one at Rajahmundry—and attached to them are secondary training classes to which are admitted undergraduate teachers. There are also six government and two aided secondary training schools or sections for masters, and nine government and fourteen aided secondary training schools for mistresses. In July last seven new secondary training sections for masters were opened.

In the following report an account of the work of training teachers at Saidapet is given, and it may be taken that what is set forth in regard to secondary training applies in general to the other secondary training schools for masters. Work on similar lines is carried on in the training schools for women, as the system of secondary training and the courses of study are based on the 'Scheme of work in training schools' issued by the department.

It is when one comes to the model or practising schools that a difference is found between the colleges at Saidapet and Rajahmundry and the mufassal schools. At Saidapet and Rajahmundry there are complete high schools, whereas in the other training institutions for undergraduates the model schools are of the higher elementary grade. As regards the training schools for women, some of the model schools are secondary in character, others elementary. The educational qualifications of the staff of both secondary and elementary training schools or sections, in so far at least as government institutions are concerned, are similar, but the staff of the higher elementary grade model schools is not so highly qualified as that of the model high schools.

As this report deals with the training of secondary teachers, no more than a passing reference need be made to the training

of elementary teachers. In the Madras Presidency, there are three grades of training institutions-training colleges, secondary training schools and elementary training schools. The last are of two kinds-higher grade elementary and lower grade elementary. Into the former are admitted candidates who have passed the annual examination of the third form or eighth standard and have been found fit for promotion to the fourth form, or have been awarded an elementary school-leaving certificate of the eighth standard, while into the latter are admitted those who have passed the late primary school examination or a corresponding public or school examination. Preference is given to candidates whose educational attainments are above these minimum requirements. In lower elementary training classes will therefore be found men of varying degrees of attainment, and a similar diversity is to be met with in the higher grade elementary training school, but the diversity is not so marked. In the body of the report we shall have to remark upon a similar diversity of attainments in secondary training schools.

The training course for elementary teachers lasts for two years in the case of both grades of students and the subjects of study are laid down in the 'Scheme of work in training schools.' Most of the time is devoted to improving the general knowledge of the teachers and professional training is given chiefly by means of model and criticism lessons. Formal lectures on 'method' are no longer given. It is laid down for the guidance of the training staff 'that model lessons should be arranged in courses, each course covering one of the school subjects or a well-marked portion of it.' The same system marks the arrangement of criticism lessons—'the model lesson of each week should precede the criticism lesson and the latter should be an attempt to carry out in practice what has been learnt in the former. Teachers under training are given teaching work in the model school and are also given opportunities of observing the teaching of the staff. The notes taken during these hours are criticised by the members of the staff.

It is to be noted that in this Presidency the term 'secondary' or 'secondary grade' training is applied to the training of teachers who have passed the Matriculation examination or an

equivalent test and are not graduates, while the term 'collegiate' training is used to designate the training of graduates. A secondary training school occupies a place in the system of institutions for the training of teachers midway between the training college and the elementary training school, and follows, like the latter, courses prescribed by the Director, while a training college follows the course prescribed by the university and adopts a system of training the working of which is left to the Principal subject to the approval of the department.

In the report expression is given to opinions on various points. It should be understood that they are those of the writer of the report and not necessarily those of the department.

Admission.

Graduates seeking admission into the Teachers' College must produce a diploma of a university in the British Empire or other satisfactory evidence of graduation. Undergraduates must produce a completed secondary school-leaving certificate accepted by the principals of the training colleges, or, in the case of secondary training schools, by the officers responsible for the selection of students, or a certificate of having passed the matriculation examination, or the European high school examination or the late higher examination for women, or other corresponding test accepted by the Director of public instruction. Persons who have failed in the matriculation examination but who have obtained the required percentage of marks in such subjects of the public examination under the secondary schoolleaving certificate scheme as are notified from time to time by the Director of public instruction are also eligible for admission. In addition to these certificates of general educational qualifications, candidates must submit certificates of conduct, of health and of age. As to age, a candidate should not be less than fourteen and should not exceed twenty-five years of age. Exceptions, however, are made in the case of teachers who have been employed continuously for not less than three years, the limit in • such cases being thirty-five years. At the discretion of the principals and other responsible officers, teachers over thirty-five years of age are admitted.

In awarding stipends to candidates preference is given generally to those standing highest in the order of merit in the corresponding general education test, subject to the condition that all the great classes of the population are, as far as practicable, fairly represented in the allotment Priority of selection is given, in the order in which they are named, to the following classes of candidates:—

- (a) Teachers employed in public schools.
- (b) Persons to whom local boards or municipal councils have given provisional appointments in schools under their management.
- (c) Village schoolmasters to whom teaching is a regular profession.
- (d) Persons specially selected by managers, or headmasters, or headmistresses, under an agreement to return as teachers.
- (e) Persons desirous of adopting the teacher's profession.
- As regards holders of secondary school-leaving certificates preference is given in the order of merit to—
 - (i) those who show "sufficient knowledge in two of the subjects specified in group C other than shorthand and typewriting" and the holders of which are consequently eligible for Government service; and
 - (ii) those who do not show two such C Group subjects.

Stipends.

In the Teachers' College, Saidapet, and other Government training institutions, provision is made annually for the payment of stipends from provincial funds to students under training. In the case of the Saidapet College the provision is for one hundred graduates and eighteen undergraduates, but as a rule the numbers under training in any one year exceed these figures as local boards and municipalities provide in their budgets for the grant of allowances not exceeding the substantive pay to permanent teachers from schools under their management. There are also candidates who are prepared to take the course without the payment of any stipend. It may be noted that, without the express sanction of the Inspector, the number under training in any class of a training school shall not exceed forty.

The ordinary rate of provincial stipend per mensem is Rs. 15 for a graduate, and Rs. 12 for an undergraduate. Special rates are also sanctioned in the case of the following persons:—

Collegiate Departmen	nt.				
•					Rs.
Masters of Arts, Muhammadans, Hindu mis	tress	es, P	anchai	mae	20
European and Anglo-Indian masters.			•		35
European and Anglo-Indian mistresses	:	•	•		25
Secondary Departmen	nt.				
European and Anglo-Indian masters		•	•		30
European and Anglo-Indian mistresses					20
Hindu and Muhammadan mistresses					14
Manual Training Department	;				15

From the statistics furnished in table A, page 8, it is evident that the rates of stipend offered are sufficiently attractive to induce teachers to undergo training. But a further attraction, and one that probably weighs more than any other, is that after training the prospects of a teacher in the matter of salary and his position on the school staff are enhanced. The department insists upon the employment of qualified teachers. The salary of an untrained graduate may be taken as ranging between Rs. 50 and Rs. 65 with no hope of increment. Generally after training he is given a fixed salary of Rs. 70 to Rs. 80, or is placed in a progressive grade of Rs. 70 to Rs. 100. There are of course considerable variations in the rates of salary, due chiefly to the financial status of the management and to the locality of the school, but there can be no gainsaying the statement that a teacher's position is improved by the possession of a diploma granted by the university or of a certificate awarded by the department. An untrained undergraduate teacher receives a salary ranging between Rs. 15 and Rs. 20 or Rs. 22 per mensem; on the completion of his training course he will be given Rs 25 or Rs. 30 and can hope to rise to Rs. 50.

In addition to higher salaries there are the inducements of provident funds and pensions. In the case of Government institutions the teachers are eligible for pensions under the Civil Service Regulations. Local bodies are allowed by Government to establish provident funds for the benefit of permanent officers and servants in superior service including teachers, and some local bodies have funds. Teachers who have served such bodies for not

less than twenty years are also eligible for gratuity. As regards schools under private management, only about fifty institutions have provident funds, the rules of which have been approved by the department. These funds are aided by Government by means of additional teaching grant limited to half of the amount contributed to the fund by the management.

Agreements.

Every student, before any stipend is paid to him, euters into an agreement binding himself—

- (i) to remain in the institution during the period prescribed and during that time to abide by such rules as may be laid down for regulating his attendance and conduct;
- (ii) to abstain whilst under training from engaging in any other avocation;
- (iii) to abstain from attending any other institution except with the permission of the head of the training college or school;
- (iv) to appear for such examinations as may be prescribed by the controlling authority;
- (v) to serve as a teacher in a recognized institution or keep an elementary or secondary school within the jurisdiction of the Madras educational department (or, in the case of board stipendiaries, within the jurisdiction of the board concerned) for at least three years in the case of a male student, and two years in the case of a female student, and to enter upon such duties as soon as a suitable opportunity presents itself after the period of training is over;
- (vi) to furnish the head of the institution, through the inspecting officer of the range in which he is employed, every six months during the three or two years referred to above, with information regarding residence, appointment held, salary and any other particulars which may be needed to enable the head of the institution to keep a history of the students trained in it.
- If, from any cause other than continued ill health certified to by a recognised medical authority, a student fails to fulfil the conditions of the agreement, he may be declared to be unfit, absolutely or for a specified period, for employment as a teacher. If a stipendiary student, he shall also be required to refund the whole amount drawn by him from provincial, local or

municipal funds on account of stipend and travelling allowance, or such part of it as the authority financially concerned considers equitable in the circumstances of the case. In the case of a non-stipendiary student who has not already paid the fees prescribed, he shall be required to defray the cost of his training at the rate fixed as per regulations under fees and to refund any sum spent as travelling allowance on his account.

Recruitment.

The reports received from inspectors of schools and the statistics of the Teachers' College show that the number of undergraduate teachers seeking admission into training schools exceeds the provision made for training this class of teachers. Inspecting officers are continually urging managers of schools to send their untrained teachers for training, and the teachers themselves, in order to improve their prospects, are eager to be trained; in fact many are prepared to take the course without a stipend and bear the cost of the outlay necessitated by living in a town which in some cases is far from their homes. In July of this year secondary training classes were attached to selected mufassal institutions, public and private, in order to meet the growing demand for training, and in this way a considerable number of teachers unable to obtain admission into existing training schools will have the benefits of training. The figures set forth in table A given below show that there is a need for more training schools for secondary grade teachers and that until these schools are started there will be a number of applicants who will not be in a position to improve their efficiency as teachers and to better their prospects. Especially significant are the figures relating to the Teachers' College and the Government Training School, Rajahmundry.

In regard to the training of graduates the difficulty is not felt to the same extent, although it is found that a much larger proportion of history graduates apply for admission than graduates who have taken other optional subjects for the B.A. degree. In Arts colleges also the number of history students exceeds that in any other branch. For example in the year 1917 there were 485 students who took their B.A. degree in history and 401 who

took their degree in other subjects, including philosophy and languages. The figures for 1916 were 322 and 254 respectively. The numbers applying for entrance into the Teachers' College in 1917 were, history graduates 124, other graduates 130. In 1916 the figures were 95 and 124 respectively.

It seems desirable at this stage to give two tables which set forth the proportion admitted from schools managed on the one hand by Government, local bodies and municipalities, and on the other, by private bodies—Table B, and the proportion of teachers and non-teachers admitted during the last five years into colleges and secondary training schools—Table C.

Table A.

THE NUMBER OF CANDIDATES REGISTERED AND THE NUMBER SELECTED.

I. Training institutions for men.

Name of institution.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17	Total.
1. Teachers' College, Saida- pet—			; 			
(a) Graduates .	138/93	167/108	199/103	187/111	221/114	912/529
(b) Under-graduates .	51/2 3	81/30	136/31	140/43	192/45	600/172
2. Government Secondary Training school, Tanjore.	42 /3 3	40/19	79/31	101/38	127/52	389/173
3. Government Secondary Training school, Coimba- tore.	44/18	27/16	36/20	74/29	65/39	246/122
4. Government Secondary Training school, Calicut.	19/12	40/11	58/20	68/33	79/40	264/116
5. Government Secondary Training school, Manga- lore.	 .	•••	15/5	20/9	42/26	77/40
6. Government Secondary Training school, Berham- pur.	••			***	34/23	34/23
7. Government Secondary Training school, Rajah- mundry.	113/40	120/55	170/71	250/65	280/101	939/332
8. American Mission Train- ing school, Pasumalai.	23/16	29/14	20/15	56/26	75/81	203/102
9. C. M. S. Training school, Palamoottah.	17/17	35/22	37/17	54/24	73/29	216/109

II. Tr	aining	institutions	for	women.
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Name of circle.	1912-13.	1913-14.	1914- 15.	1915-16.	1916-17.	TOTAL.
Northern Circle .	No Sec	condary '	Training	School fo	r women	,
Southern Circle						
(1) Sarah Tucker Train- ing school, Palam- cottah.	7/7	9/9	7/7	15/15	9/9	47/47
(2) Capron Hall Training school, Madura.	***		,	6/6	9/9	15/15
(3) Government Training school, Coimbatore.	***	•••			8/8	8/8
(4) St. Anne's Training school, Mangalore.	11/11	13/13	9/9	21/21	18/18	2/72
Central Circle— (1) Presidency Training school, Egmore.	18/18	21/21	17/17	32/32	20/20	108/108
(2) Government Secondary Training school, Triplicane.	**	#	10/7	17/13	24/13	51/38
(3) U.F.C.M. Training school, Rayapuram.	† 5	† 1 9	† 12	† 8	† 12	† 56

^{*} Figures not available.

Table B.

THE NUMBER OF TEACHERS ADMITTED FROM SCHOOLS MANAGED BY GOVERNMENT, LOCAL BODIES, MUNICIPALITIES AND PRIVATE BODIES FOR THE QUINQUENNIUM, 1912-13 to 1916-17.

I. Training institutions for men.

Name of institution.		pτ	nder Iblic Iagement,	Under private	
(a) Teachers' College, Said	lape	t	шаг	management.	
(1) Graduates .	•		•	104	367
(2) Under-graduates		•		51	118
(b) Other institutions		•		229	610 ±
‡ Figures for on	e sch	ool not av	railable	θ.	T

II. Training institutions for women.

name of (eirele.					Under public nagement.		der ate ment.
Northern	Circle	٠			•	•••	•••	§
Southern	"	٠	•	•	•	2	15	
Central	"	•	•	•	•		• • •	1
	§ No se	condary	training	school	for wor	nen.		-

^{||} Figures not available.

[†] Number applying not available.

Table C.

THE NUMBER OF TEACHERS AND NON-TEACHERS ADMITTED FOR TRAINING.

I. Training institutions for men.

Name of institution.				Teachers.	Non-t cachers.
(a) Teachers' College, Said	lape	t			
(I) Graduates .	•	ě	•	468	61 *
(2) Under-graduates	•	4	9	168	4
(b) Other institutions		•		839	118†
# Chiefr Hananna anadmatas					•

Chiefly Honours graduates.

II. Training institutions for women.

Name of cir	cle—						Tea	chers.	Non-teachers.
Northern	Circle	•	•	•	•			•••	‡
Southern	21		•		•			21	121
Central	,,		•	•				56	153
	t No	Reno	ากสื้อเรา	traini	or gelie	വി ഫ	r waan	ıAn	

No secondary training school for women.

It will be noted that most of the teachers come from schools under private management, and that in training institutions for men the 'non-teacher' is in the minority, while in similar institutions for women the non-teacher predominates.

The question whether teachers or non-teachers form the best material cannot receive a definite answer. In the natural course it would appear that the teacher with experience should form the best material, but I have had students who have never stood in front of a class remarkably quick in arriving at what was required of them. One advantage that the inexperienced student possesses is that he comes without any preconceived notions and has not formed habits that have to be broken. It sometimes happens that the experienced teacher of some years' standing is adamantine; he cannot throw off the shackles of wrong methods; he argues that he has taught a subject for so many years and has been successful in preparing pupils for examinations, and consequently there cannot be much amiss with his methods. He has the advantage over the non-teacher, however, of being able to face a class with confidence, of being able to question with ease, of being resourceful in times of difficulty.

[†] Eighty-one of this number were trained in institutions under private management.

Staff.

The staff of the (a) Collegiate, (b) Secondary department of the Teachers' College consists of—

- (a) Collegiate section.—Principal and vice-principal in the Indian educational service, salary Rs. 500—50—1,000. Seven lecturers, some of whom are in the provincial educational service and the rest outside that cadre. The minimum salary of these lecturers is Rs. 200, the maximum depends upon their position in the Provincial Service. The lecturers in mathematics, physical science, natural science and history are masters of Arts and licentiates in teaching of the Madras University, the senior lecturer and the lecturer in geography are bachelors of Arts and licentiates in teaching, while the lecturer in kindergarten is a lady who has attended the course of instruction in the Froebel Institute, London, and obtained the diploma.
- (b) Secondary section.—The staff of the secondary section ordinarily consists of a headmaster and an assistant in the cadre of sub-assistants (subordinate educational service), and the rate of salary ranges from Rs. 75 to Rs. 200. The officers who are licentiates in teaching, are either masters of Arts or bachelors of Arts. In addition, the collegiate and the secondary departments have in common with the school two drawing masters and two drill instructors on the following salaries:—

Drawing master (senior)		•		Rs. 60 (40-2-60)
", " " (junior)	•	• ,	•	,, 2 0
Drill instructor (senior)		•	•	" 50 (30—2—50)
,, ,, (junior)		•	•	,, 15

For the manual training department an instructor from England on a salary of Rs 400-20-500 has been appointed temporarily for a period of five years.

In the collegiate section the lecturers in mathematics, physical science, natural science, kindergarten, history and geography are in entire charge of and responsible for the efficient working of their particular sections, while the English lecturer has to organise the work of all the students making up the several divisions. With one hundred or more graduates he finds it difficult to make satisfactory arrangements for the supervision of the practical work

in the school, for criticism lessons and for the effective checking of observation notes, i.e., of notes taken by students when observing the teaching of the permanent staff of the school and of their class mates. Assistance in this work has to be given by the principal and the senior lecturer.

The mathematics and physical science lecturers have each on an average 24, the history and geography lecturers 40 to 45, the natural science lecturer 4 or 5, the kindergarten lecturer 8 or 10 students. In the physical science section it has been thought expedient to limit the admission to 24 as the lecturer finds that a larger number hampers him in his efforts to assign useful courses of laboratory and workshop practice.

The two members of the secondary staff are sufficient, provided the class does not exceed twenty students. In the last two or three years, however, the strength has risen to sixty owing to the large number seeking admission and to the opening of the manual training class. The smallness of the staff for such a large number of students is due to the supposed temporary nature of the arrangements. If secondary training is to form a permanent part of the work of the Teachers' College, the question of strengthening the staff will arise, and a system similar to that obtaining in the collegiate department, whereby each member of the secondary training staff would be free to devote himself to the study of his own subject and of how best to teach it, may be adopted.

Courses.

We may now proceed to a consideration of the nature of the courses prescribed for training teachers employed in secondary schools. In this Presidency such teachers may be divided into two classes comprising the graduate or the specialist, whose activities lie in the three highest forms, and the under-graduate, whose work is confined to the teaching of most subjects in the lower forms and classes. Collegiate training is concerned mainly with inculcating methods of teaching special subjects, such as mathematics, history, geography, science and English, while undergraduates are given instruction in the methods pertaining to the teaching of all subjects of the school curriculum in the lower forms and classes. Not only is the trained graduate

teacher concerned with teaching his own special subject and in most cases English, but he is also expected to guide and supervise the work of his colleagues employed in the lower forms in teaching the subjects bearing on his special branch. In other words, the specialist in science is expected to keep an eye on the teaching of elementary science in the lower forms, the specialist in history on the teaching of history, and so on. In the Teachers' College this work of supervision and guidance devolves on the special lecturers who draw up syllabuses which are followed in the school and which are published by the Government Press in the form of bulletins for the guidance of such teachers as may care to consult them in the preparation of courses of study suitable to their own schools.

Thus a graduate teacher when he leaves college has gone through a course in the theory and practice of education comprising the elements of psychology and logic, organization, discipline, etc., and has received instruction in the methods of teaching English and at least one other subject, the subject being in most cases the one studied as his optional for the B. A. degree examination. It may be history, or mathematics, or physical science, or natural science. In addition to his special subject the history graduate takes geography. It would be an advantage if geography could be made to stand by itself as one of the special subjects for the L. T. degree; but I would not advocate this step being taken until the university makes provision for a course of geography. But to return to the specialized courses. There can be no doubt that concentration on two subjects leads to a more thorough and effective teaching of the subjects and that a teacher feels that his energies are not being dissipated by his attempting to become proficient in subjects for which he has no liking, or no marked talent. The old system of having a lecturer in method who took up the various subjects of the school curriculum and discoursed on suitable methods of teaching these subjects to a class composed of mathematics, science, history and philosophy graduates is gone. Under that system the history graduate, whose knowledge of mathematics and science was limited, had perforce to acquaint himself with the methods of teaching subjects for which he might have a positive dislike.

The problem of the graduate in philosophy still remains with us and to it has now been added that of the honours graduate in English language and literature. The latter is not in a position to do himself justice if he takes up history and geography or science or mathematics as his special subject and therefore drifts into the kindergarten. The philosophy graduate generally enters the history and geography section, but within the last year or two some have chosen kindergarten as their special branch of study. Speaking generally, the graduate in philosophy is assigned English and history work in schools.

From the foregoing remarks it will be gathered that teaching by specialists is a feature of the schools in the Madras Presidency; at any rate for the past five or six years great emphasis has been laid on the training of graduate teachers in the subjects in which they are specially qualified. Whether our system of specialized training is justified by results may be judged from the opinions of certain inspectors of schools—

One inspector says:—"It seems to me sound that all teachers should study methods appropriate to the teaching of English not only because in the actual circumstances of Indian high schools they may have to teach English, but also because English is the medium of instruction in the non-language subject which the teacher is employed mainly in teaching, e.g., in connexion with the correction of oral and written answers in history. I think they will do their non-language work, which is in English, better for having studied methods of teaching the language which they employ as the medium of instruction."

Another inspector says:—"I approve of this system of specialization and my experience is that good work is being turned out by teachers trained in this manner."

Another inspector says:—"I am a firm believer in specialization in the L. T. course. The individual teacher is engaged for the whole of his professional life in the teaching of English plus the special subject in which he took the B. A. degree. Obviously it is of the first importance that he should be trained deliberately in the teaching of these two subjects. To confine a teacher's training to general apsychology and pedagogy is to train him for the post of headmaster—a remote possibility for the majority

of teachers . . To teach a subject effectively and rightly the teacher must be trained deliberately to teach that subject: he must be taught the special methods appropriate thereto. The above remarks do not commit me to the opinion that specialization should be intensified at the expense of general training. Specialization alone in one or more subjects would produce a teacher of narrow views and practice. Again, all subjects have a common foundation and common elements so far as their teaching is concerned, and a general training directed to these common elements is therefore essential."

Another inspector says:—"I fully endorse the desirability of giving instruction in the methods appropriate to the teaching of two subjects in the L.T. course—one of which should be either English or a second language, and the other mathematics, science or history and geography. In the financial condition of most of our secondary schools the teachers' time-table has to be so arranged that a teacher is given work in at least two subjects of which one is generally a language subject; and such a change of work during the day is desirable in the interests of the teacher himself."

The courses of study for secondary training schools are laid down in "The scheme of work in training schools" and comprise general principles, organization and discipline and methods to be adopted in teaching languages, mathematics, elementary science, history and geography. Classes in drawing and elecution are also held. The practical work consists of observation of the teaching of the members of the staff and of teaching in the school.

From a consideration of the courses laid down for the two grades of teachers, it follows that the graduate and the undergraduate cannot profitably be trained together. The chief obstacle is the higher attainments of the former. The knowledge of English or mathematics, or science, or history, or geography possessed by the matriculate is not of a high standard, and energy would be wasted in attempting to train the secondary grade teacher along with the graduate. The specialized course prescribed for the graduate is also a reason for keeping the graduate and the under-graduate apart in their training. It may be worth mentioning in passing that in the Madras Presidency the existing specialized training of the collegiate grade student has at times been adversely criticised.

It is maintained that some trained teachers become headmasters of schools and as such should be acquainted with the methods of teaching all subjects of the school curriculum so that they may exercise effective supervision over their assistants. Granted that headmasters should have some idea of the claims of contending subjects, yet it can be held that, with a staff of assistants trained in special subjects, a headmaster may well entrust the work of preparing syllabuses and of seeing to their proper working to his colleagues.

Duration of course.-At present the course for graduates and under-graduates covers one year, and is a provisional arrangement in so far at least as the under-graduate is concerned. future date it is intended to extend the course of training of under-graduates to two years during which time, in addition to the professional training, they will be given opportunities of improving their general education. It will be admitted by all that after a year's study of the methods of instruction and of the problems of discipline and school organization, a teacher is armed against the worst faults of inexperience and ignorance; but more than this is necessary. The teacher's body of knowledge when he enters the training school must be substantially increased, and this object can only be attained by lengthening the course so as to enable teachers to improve their general knowledge of the subjects they will be expected to teach by attending special classes in high schools, or in colleges.

Methods of teaching.

I may now pass on to a consideration of the methods of teaching adopted.

In the time-table for collegiate and secondary grade students periods of 50 minutes each are devoted to lectures, model and criticism lessons, observation of the teaching in school and practical work or teaching in school. Physical science graduates also go through a workshop course of metal work, wood work and glass blowing, and learn how to fit up apparatus and to make small epairs. In addition, they have a course of elementary exercises in the latoratory and use the simple apparatus found in high schools. They learn the imperfections of such instruments, the

methods of minimising their effect and the limits of accuracy that may be expected in high school work as done by beginners. By observing the laboratory class of the pupils they also become acquainted with the common mistakes made by them and the direction in which guidance on the part of the teacher is most wanted.

The natural science graduates have a course in glass-blowing and fitting up of apparatus for simple experiments. They also learn to handle simple tools. The collecting and preserving of insects, the drying and preparing of plants for the herbarium, the preserving of plant and animal specimens in spirit and formalin for the museum, school gardening, the elements of photography and lantern slide making are also included in the course of training. The students are occasionally taken out on excursions for the study of specimens in the fields and rivers.

In addition to the usual course of lectures, model and criticism lessons, observation and teaching work, the mathematics graduates devote about twenty-four periods of an hour and 40 minutes each to practical mathematics. The end in view is to show the teacher the direction in which the subject may be correlated with geography and physics, the aspects from which it leads one to higher mathematics, or commercial, or technical mathematics. Another aim is to give him a training in the proper use of the black-board, to teach him to draw neat and accurate figures free hand and with instruments.

In the history course emphasis is laid on the need for a free and full use of various aids to the teaching of history, such as documents, pictures, sketches, maps, charts, etc. Attempts are made to determine the stages in a pupil's school career when these aids are most useful. Two periods are set aside each week for what is termed 'practical work 'as distinct from practice in teaching. Exercises are set on the use of documents, maps, pictures, etc. Maps also are drawn by students both on paper and on the black-board. Printed sketches, pictures and cuttings from illustrated papers and magazines are distributed among the students, and they are asked to state what they would expect pupils at particular stages to observe in and infer from them. Charts depicting local history are also made.

The knowledge of geography possessed by the history and philosophy graduate is very limited and consequently the whole of the first two months is devoted by the lecturer to imparting some knowledge of the subject matter. A knowledge of principles is insisted upon, and students are led to acquire facility in the use of atlases, maps and books of reference. Exercises in map-drawing, sketching and filling, and practice in the use of pictures, diagrams, maps, and globes from an important part of the practical course. Exercises in the use of statistics and readings from original descriptive source books of travel are also given. The aim kept in view is to enable the facts to be learnt and understood through the working out of these exercises and to bring out the causes and principles underlying them.

The syllabus in English and special subjects prescribed by the University are followed by the lecturers of the college staff, while the members of the secondary grade staff are guided by those laid down by the department in the "Scheme of work in training schools."

The approximate number of hours devoted to lecturing is as follows:—

Collegiate section.

Theory and prac	tice o	f edu	cation	•			•		70
English .	•		•	•	• .	•	•		21 to 25
Mathematics, ph	ysica	l scie	nce	•		•			54
Natural science,	histo	ry, ge	eograp	hу	•	•	•	•	33
Kindergarten	•	•	•	•	•	•	• -		30
		Sec	ondar	y seci	tion.				
General principle	e s		•	•	•				60
Special methods		•	•	•			•	•	85
Kindergarten	•	•	•	•		•	•		30
Organization	•	•	•	•	•	•	r		60
Discipline	•	•	•						30

Model lessons are given throughout the course by the several lecturers, and, in addition, all students are afforded, as far as practicable, opportunities of observing their lecturer's teaching in the school. The English lecturer, for example, in taking the fourth or fifth form for three periods a week, instructs students in turn to observe him for three weeks or so. The notes of observation taken during these periods are read

through by him and discussed, if necessary, with individual students. A similar system is adopted with regard to the notes taken by those told off to observe the teaching of the members of the permanent staff of the school and students under training. Much of the time of the students is thus given to observation, and, with a good teacher on the permanent staff, considerable benefit is derived by the students from this part of their training.

Criticism lessons:

In addition to the criticism lessons given before the whole class or a section of the class, we have adopted a system wherein lessons are given in the school itself before half a dozen to a dozen students and with a lecturer presiding. The lecturer meets the students at some convenient hour after the lesson, and discusses with them their merits and defects. This plan has the advantage of saving time, of not disturbing classes by moving them from the class room to the lecture hall, of instilling, in the case of nervous students, a certain amount of confidence, and of making the lesson more natural and less formal in character. Such lessons also fit in naturally with the stage of knowledge and advancement of the the pupils and follow the lines of the ordinary class work according to the school time-table. Teaching under conditions approaching as far as is possible the normal calls forth a student's powers of discipline and class management. has so far worked satisfactorily. Further, with a class of over a hundred graduates it is impossible to conduct formal criticism lessons in English in the time set apart for training. subjects there is held at least one formal criticism lesson per week, and it is only with regard to English that it has been found necessary to conduct additional lessons in the class room, although in the special subjects also the lecturers find it advantageous to have criticism classes in the school.

Observation.

Something has already been said about students' observation work which consists of writing notes on the teaching they have observed in the school, these notes being criticised by the members of the staff responsible for the particular subject. All students are assigned, as far as possible, to assistants teaching in class IV up to form VI; in other words, they are made to observe

the teaching of English and other subjects in the preparatory. lower secondary and upper secondary departments in turn. the year is divided into three sessions this arrangement is found quite workable, and students are afforded opportunities of watching the teaching of English and the appropriate special subjects in all the departments of a high school. The permanent assistants of the school in charge of the English work of forms I to VI are trained graduates, while the English work in classes IV and V is in charge of the lecturer in kindergarten and a trained secondary grade teacher. In fact in the model school practically all the teaching in forms I to VI is done by certificated graduates. Students also spend a part of their time in observing the teaching of their classmates, and the notes taken then as well as those taken while observing the teaching of the school staff are scrutinized by the lecturers and commented upon. A similar plan is adopted in regard to the special subjects. The history student observes the teaching of history and geography; the physical science student the teaching of physics. chemistry and elementary science; the natural science student the teaching of botany and elementary science; the mathematics student the teaching of elementary mathematics, geometry and algebra. The lecturers aim at training students to take note of essentials, to eschew the trivial, to be methodical and neat. It is believed that these observation notes prove to be a useful record for reference by the student after he leaves the college and resumes work in his school. Much importance is therefore attached to this part of the course.

Practical work.

Turning now to the actual practice in teaching, it is found that, with a practising school of 570 pupils on the rolls, divided into 20 sections, difficulty is experienced in giving every student a few hours' practical work. Further, the school has a full complement of trained graduate and undergraduate teachers, and the pupils are no longer subjected for any length of time, as in the past, to the teaching of untrained men. If the average number of students under training, both collegiate and secondary

grade, is taken to be 160, it will be readily understood that sufficient time cannot be given to practical work.

I would welcome greater facilities for practical work. Especially in the case of the secondary-grade students of the Teachers' College, it must be admitted that they cannot be given a sufficiently varied range of practical experience in teaching. Even the graduate teacher with his specialised course of training is handicapped in the matter of teaching experience.

A few words may not be out of place here on the question as to whether practical work should synchronise with, or succeed theoretical work. In the Teachers' College, and I believe in most training institutions, the practice is to give instruction in the preparation of teaching notes and general methods of teaching and class management for the first four or six weeks of the course and then to call upon teachers of some years' experience to give criticism lessons, or teach in the school itself under supervision. If the whole class under training were composed of men who had spent two or three years in teaching before entering on a course of professional training, it would be possible after two weeks or so to give them practical work, but when the class contains men who have never stood up before a class of boys. there would be neither profit to the student nor to the pupils in adopting such a course. Under the existing conditions I feel that students are made to teach at too early a stage of their training and that they would be in a better position to do themselves justice if they could spend a much longer time in observing the work of the permanent staff and could receive more theoretical instruction. If the course were extended to two years, it would then be possible to devote the first year to theory and observation and the second year to practice, with this proviso, however, that the number of training institutions is increased.

Drawing and manual training.

Drawing is a subject for which students do not show great aptitude, and, whether this is due to indifference, or to the fact that they are unable to realize the importance of drawing as an aid in teaching, or to a feeling of diffidence as to their capabilities,

it is hard to say. The fact remains that seldom does one find teachers capable of putting an illustration on the black-board which is useful to the class. Given time to prepare a sketch before entering the class-room a fair production may be expected, but for rapid, clear and instructive sketches on the black-board during the progress of a lesson we seek, for the most part, in vain. It is the opinion of inspectors of schools, I believe, that drawing is not taught satisfactorily in schools. If this is the case, then the teachers of drawing in training schools have an up-hill task. Our experience is that the drawing masters have discouraging material to work upon, but at the same time we must not lose sight of the fact that they do not realize sufficiently the pedagogic side of their work.

During their training course graduates spend two periods a week, under-graduates three periods a week in learning to draw on the black-board and on rough brown paper in chalk, and at the end of the year are examined by the manual training instructor and the drawing master. The subjects of the school curriculum such as science, history and nature study furnish material for practice. Their proficiency in drawing is noted in the certificate issued by the college. Taken as a whole the chalk work on paper is creditable and certainly students do show progress in this line. It is the black board work that is so poor. Lack of perspective, gaudy and unnatural colouring of objects, want of clear bold outline, lack of sense of proportion are faults only too commonly met with.

At the Teachers' College a manual training class was started about two and-a-half years ago and nine or ten qualified instructors have left the college. Of this number not more than three are employed as instructors in schools. At present there is no demand for such men, owing mainly to want of funds, and the number of schools with a manual training department can be counted on the fingers of one hand.

The course lasts for two years and consists of clay and cardboard work, wood work, mechanical and art drawing. The qualifications for admission are similar to those for undergraduates, and the amount of stipend is Rs. 15. Along with their special course manual training students receive instruction with the secondary grade students and sit for the training school-leaving certificate examination. They have thus a double qualification on passing the examinations, viz., they are qualified secondary grade teachers and manual training instructors. The officer in charge of the class is a qualified instructor with experience of such work in England.

Physical instruction.

All students undergo a course in drill and physical exercises and are divided into sections, each section being under instruction for two hours every week. The instructor follows the course laid down in the Board of Education's syllabus of physical exercises. As far as possible opportunities are given to individual students to drill small classes of their fellow students. At the end of the year they are examined by the adjutant of one of the volunteer corps in Madras. Our experience has been that the students acquit themselves creditably in drill and physical exercises, but come to grief in the actual teaching. They are capable of issuing words of command and to a certain extent of explanation, but they are not sufficiently observant of the individual work of the class under instruction. Many mistakes in the position of the body and limbs and in smartness of execution are allowed to pass unnoticed. The drill periods are not welcomed by many students and little enthusiasm is displayed. Some, however, are keen and smart. This feeling of indifference may be accounted for by the fact that all high schools have a gymnastic instructor whose duty it is, in the opinion of graduate and undergraduate teachers, to attend to drill, physical exercises and games, and that the assistants of the school have no concern in this part of the school curriculum. However, steps have been taken lately to impress upon students the importance of physical exercises and games. For the last three years alcourse of lectures on physiology, hygiene and games has been delivered by the physical director of the Young Men's Christian Association, Madras, and it is gratifying to be able to state that a change is coming over the attitude of teachers with regard to physical instruction. In his lectures he discusses among other subjects the existing systems of physical training and their applicability to the training of the young, the necessity for the systems being formulated on physiological principles, and the exercises designed to suit children at different stages of development. One of the ends the lecturer has in view is to interest teachers in organizing group games so that in every school the teachers may be assigned to classes and be responsible for superintending the games of their pupils. Unless such a system is followed it is hopeless to expect the majority of the pupils of a school to take part in games of any kind. A gymnastic instructor cannot attend to the physical education of three or four hundred boys. If only, therefore, graduate and undergraduate teachers can be roused to take an interest in this side of their work, much will have been accomplished in the direction of a healthier system of physical education than prevails at present.

Cost.

In the case of the Teachers' College the cost of training a collegiate grade teacher and a secondary grade teacher cannot be given separately. Taking the two grades together the average annual cost per student for the last five years is Rs. 607. If figures for the last three years are considered, the average annual cost amounts to Rs. 564, the difference being accounted for by the outlay in equipment on the reorganization of the college. In the case of mufassal secondary training schools the average cost may be taken to be roughly Rs. 210.

Examinations.

The examination for the L.T. degree is conducted by means of four written papers, each of three hours' duration. The first day's papers are on the theory and practice of education, the minimum for a pass being 35 per cent. of the total marks of the two papers taken together. The second day's papers are on (i) methods appropriate to the teaching of English and (ii) methods appropriate to the teaching of one of the following groups of subjects: (a) all subjects to young children; (b) mathematics; (c) physical science; (d) natural science; (e) history and geography; (f) one language other than English. It may be mentioned in passing that provision has not been yet made for the last

group. The minimum in this part of the examination is 35 per cent. in each of the papers—English and optional group—and 40 per cent. of the total marks in the two papers. To obtain a second class, candidates must obtain not less than 50 per cent. of the total marks, and to secure a first class 60 per cent. of the total marks. If a successful candidate obtains not less than 60 per cent. of the marks in the English or the optional group paper, he is considered to have gained distinction, and the fact is recorded in the diploma awarded to him.

Under the old regulations a practical examination was held soon after the publication of the results of the examination in the theory of education, and successful candidates were called upon to teach in the presence of a board of examiners. This examination was held in a school with which the teacher generally had no acquaintance, the pupils were new to him and there was the board of examiners sitting in judgment. The combination did not bring out the best in a teacher. Further, an examination conducted on these lines encouraged candidates to look upon the test as a sort of performance for which they had to prepare, very much as an actor has to study his part in a play. When therefore the reorganization of the L. T. courses came up for discussion it was decided to eliminate the practical test. It may be questioned whether the abolition was a sound departure. Personally I should welcome a practical test, but I would have it conducted on different lines. On passing the theoretical portion of the examination I should require the teacher to teach in a school for one year, at the end of which time he would be permitted to appear for a practical test in his own school. The test should be as informal as possible, and might be conducted by a board consisting of the inspector of the circle and the headmaster of a neighbouring high school. If successful, the teacher would be declared to have passed the L.T. degree examination. Such a test would help to improve the quality of the teaching in schools, would impress teachers with the truth that there is an art of teaching, and would in no way be a bogey—such as the old practical examination was.

Secondary grade teachers have to appear for an examination called the training school-leaving certificate examination which is conducted by the inspector of European and training

schools with the assistance of the staffs of the training institutions and such other persons as the Director may from time to time depute for the purpose. The examination is held once a year and ordinarily in the last week of March. The inspector of European and training schools determines which of the candidates shall be declared to have passed the examination, enters their marks in their certificates and publishes their names in the Fort St. George Gazette. Such persons are then called probationary trained teachers and are considered for all purposes of the Public Services Notification, the Madras educational rules and the grant-in-aid code as trained certificated teachers for three years from the 1st April of the year in which they appeared for and passed the examination. A candidate who fails in the examination may appear for a subsequent examination without further attendance at a training school.

Probationary teachers are not required to pass a formal practical examination in order to complete their certificates, but Inspectors, when they visit the schools in which these teachers are employed, test their ability in such manner as they consider necessary, and, if satisfied with the teachers' work, complete their certificates by making an entry to that effect over their signature. No certificate is completed which does not show at least eighteen months' satisfactory work in a recognized school. A teacher whose certificate is not completed in this way within three years from the date of his passing the training school-leaving certificate examination, ceases to enjoy the status of a trained teacher, and can only be ranked as a trained teacher when he completes his certificate.

In January of each year, inspectors and inspectresses forward to the inspector of European and training schools lists of teachers whose certificates they have completed, classifying them as of the first or second class. Consolidated lists of such teachers are published from time to time in the Fort St. George Gazette by the inspector of European and training schools.

The following tables give the number passed and the number examined in the quinquennium 1913—17:—

	L.	T.	De_{δ}	gree	examina	ıtion,	Teac	hers'	Coll	ege.	
1 913					92/95	1	.916				89/111
1914	•				96/103]	917				94/112
1915				_	89/100						•

Training School-leaving Certificate examination, Teachers' College.

1913				18/21	19 16		•	31/42
1914	•		•	24/24	1917			60/65
1915		•		2 6/30	i			

Training School-leaving Certificate examination, other secondary grade schools.

1913				93/116	1916			141/193
1914				91/118	1917	•		241/280
19 15	•	•	•	128/153				

It will be seen that the precentage of passes in both grades of examination is high.

Subsequent careers of trained teachers.

The majority of teachers come from colleges and schools under private management and return to their appointments after their training. The remainder are employed either as inspecting officers or as lecturers and teachers in institutions under public management. By far the largest number of collegiate teachers are entertained in high schools under private management, a few are appointed as headmasters of middle schools. Undergraduates or secondary-grade teachers are employed in the lower forms or classes of high schools, in middle schools and in the model schools attached to secondary and elementary training schools.

We find in this Presidency that a few candidates seeking admission have, before becoming teachers, been employed as clerks in the different departments of Government and that some have attended the law college for one or two years. At the end of the three years' agreement to serve as a teacher in recognised institutions under the control of the Director of public instruction, Madras, a teacher is free to seek employment in schools outside the jurisdiction of the Director, or to enter any other walk of life. But very few give up the teaching profession after being trained. If they do, it is generally with a view to practising as vakils.

It is interesting to note that in the last three years a considerable number of masters of Arts and bachelors of Arts (honours) have joined the Teachers' College. In the years 1915, 1916 and

1917 the numbers are 18, 24, 21, respectively. We find, however, that these young men are not inclined as a rule to serve as assistant masters in schools, nor do managers of schools show any special desire to employ them. Work as lecturers in colleges is their ambition. The inspecting line does not seem to appeal to them. As regards their employment in schools, salary is the main difficulty since schools are not in a position financially to offer a salary commensurate with their attainments. They are prepared to enter Government service on Rs. 60 and trust to their lucky star, but they will not apply for posts in private schools carrying a salary of less than Rs. 100.

Conclusion.

In concluding this report it will not be out of place to give a brief history of the Teachers' College and to offer a few remarks on improvements that may be effected in the near future in the training of teachers.

When the education department was constituted in the year 1855, the Director of public instruction, feeling the need for a number of qualified schoolmasters to be placed in charge of schools to be opened in the important centres of each district, obtained permission from Government to open a normal school in Madras. In the year 1856 the school was formally opened and teachers of all grades were admitted for a two years' course of general instruction and professional training. In 1872 the activities of the school were confined to professional training and the course was reduced from two years to one year, while in 1875 the period of training in the case of graduates was reduced to six months. When it was resolved in 1885 to have an L. T. degree, the institution was reorganised and affiliated to the University and began to prepare candidates for the degree. The school was now designated the Teachers' College and was removed to Saidapet in 1887. year 1911 saw the reorganisation of the college and the amalgamation with it of the Training College, Rajahmundry, which had been opened in 1894. An increase in the number of stipends from about 50 to 100 was also sanctioned. This was the year in which the specialised training of graduates was begun and the new syllabuses prescribed by the university came into operation. In 1916 it was decided that special provision should be made for the training of graduate teachers coming from schools in the Telugu or northern districts of the Presidency, and in July 1917 the Training College, Rajahmundry, modelled on the Teachers' College, Saidapet, admitted 50 graduates for training. A collegiate training class was also attached to one of the aided first-grade colleges in Trichinopoly, and 20 graduates were admitted.

It will be of interest to note that the average, number of graduates under training per annum in the Teachers' College from 1887 to 1910 was 34, while in the period 1911—17 the average number was 103. In the six years preceding 1911 the average number was 48. In the quinquennium 1913—17, 484 teachers passed the L. T. degree examination. All of them received a training in the methods of teaching English, and with a few exceptions underwent a course in methods appropriate to the teaching of the optional subject in which they took their B. A. degree. Already their influence is making itself felt in schools. Improved methods are being introduced, the teaching is more efficient, more systematic work is being done, there is less lecturing and dictating of notes, there is less cram.

Coming to the improvements that may be expected shortly, it may be stated that in the case of undergraduates they hinge on the two years' course which has been sanctioned by Government but has not yet been brought into operation. With the object of improving the professional and general educational qualifications of secondary grade teachers it has been decided to extend the course of training to two years and the scheme involves the opening of new training schools in addition to those to which, as a temporary measure, have been attached secondary training sections during the year 1917-18. With these new centres and with improved pay and prospects for teachers there is every hope that in this Presidency there will be a considerable reduction in the untrained element in the staffs of our schools.

I shall now proceed to offer a few remarks on the qualifications of candidates seeking admission into secondary training schools. What strikes one is the diversity of the material entering the training school. There is the school-leaving certificate candidate, and this class forms the largest number, there is the teacher who

has passed the intermediate examination, and there is also the teacher who has passed one or two branches of the B. A. degree examination. The aim should be to add to the equipment of those holding secondary school-leaving certificates so as to render the instruction in schools as efficient as possible. Mention has been made of the specialized course prescribed for graduates who will, after training, be employed in teaching the upper forms of high schools. In the case of undergraduates who will be in charge of the lower forms-and I refer specially to those who have not gone beyond the matriculation standard-it is necessary to continue their general education so as to enable them to handle with confidence the subjects taught in the lower school. For example, the teacher who has made a special study of physics and mathematics for the secondary school-leaving certificate public examination should devote part of the time of his training course to a further study of English, history, geography and vernacular; the one who has taken up history and vernacular should give a part of his time to mathematics, elementary science, geography and English. I would have special attention paid to geography and elementary science as these are non-examination subjects under the secondary school-leaving certificate scheme.

In order to give effect to this scheme of improving the general educational qualifications of teachers under training, additional staff will be required in all secondary training institutions attached to high schools. There should be no difficulty in appointing instructors, who, by virtue of their special qualifications in particular subjects, would be in a position to give courses of general instruction and at the same time train the teachers in the methods appropriate to the teaching of those subjects. In fact the system obtaining in training colleges might be adopted.

Turning to the duration of the course for graduates, some people are of opinion that it is too short. Under existing conditions no time can be spared for any work outside the specialised courses. As has already been noted, specialization is a feature in the training of graduate teachers, and the general opinion is that the system has produced satisfactory results. But there is a danger of teachers being led to consider that their own special subject is the one subject of importance in the school curriculum and to attach undue weight to it. If the course were lengthened it

would be possible to afford students opportunities of becoming acquainted with the other school subjects. There would be no difficulty in planning a series of lectures on the general methods to be adopted in teaching physics, chemistry, mathematics, history, geography, etc., which would appeal to the teacher who was a specialist in only one of these subjects and which would enable him to arrive at an estimate of the importance of each subject of the high school course. Time would also be found for observing the teaching of the school staff and for attending model and criticism lessons. There might also be greater facilities for practical work, although I am of opinion that, in the Teachers' College, little can be done in this direction until the number of graduates under training is reduced. This reduction can only take place by opening new training colleges, or by attaching new collegiate grade training classes to existing first-grade colleges which have the necessary accommodation, staff and equipment. As an experimental measure such a training class has been attached this year to one of the aided first-grade colleges in the south of the Presidency and, in all probability, the experiment will be continued. By the opening of the Training College, Rajahmundry, and of the collegiate grade section attached to the firstgrade college, the number of stipendiary graduate students under training has been increased from 100 to 170. In so far as the graduate in physics or mathematics is concerned, the colleges at Saidapet and Rajahmundry meet the demand for admission. is when we consider the claims of the history graduate that the difficulty is felt, a difficulty which has to a certain extent been met by the opening of the training section mentioned above.

It must not be understood that I am advocating a two years' course for graduates. The one year spent by teachers in a training college has been productive of good results. All I would urge is greater facilities for practical work. The solution does not depend so much on the lengthening of the course as on a smaller number of students under training. The department has deliberately adopted a policy of encouraging teachers to undergo a course of professional training, and by means of generous allotments for stipends has made it possible to admit teachers in large numbers into training colleges and schools. The end in view in this Presidency has been to provide schools with as many

qualified and certificated teachers as possible, and we have aimed not so much at turning out ideally trained teachers as at helping to put teaching in schools on a sounder and more efficient basis by affording managers opportunities of improving the qualifications of the members of their staff by sending them for a course of training. I feel that if large numbers of teachers can be brought to the threshold of the science and art of teaching and can be guided on their way much has been done towards giving them a foundation on which, with the experience in store for them in their own schools, they may build up systematic courses of study and rational methods of procedure. I am conscious of the defects of our existing system, but at the same time I consider that it would be a retrograde step to lengthen the course at the expense of the numbers to be admitted into colleges and schools.

It is impossible to forecast the time when it will be possible to have smaller classes under instruction. Many trained graduates and undergraduates will be required for the secondary schools that will be opened year after year, and it will tax the existing training colleges and schools to meet the demand. The department may therefore be expected to continue its policy of a one year's course for graduates confident that the benefits of the past will be maintained in the future.

THE TRAINING OF TEACHERS IN THE UNITED PROVINCES.

Teachers for Vernacular Boys' Schools.

I. Grades of schools.

There are two grades of vernacular schools in the United Provinces, primary and middle. The former is the public school for the mass of the people. The length of the course is five years. A boy should leave the primary school "able to read and write a letter, to understand simple prose, to make out the writing of a lease, to keep simple accounts, to follow a map, to work out an easy sum in interest" and with a knowledge of the "easier passages in the poetic literature of his race." The middle school aims at providing a secondary education in the vernacular. Its curriculum is an extension of that of the primary school and leads up to the vernacular final examination, the syllabus for which consists of vernacular literature and grammar, mathematics (the whole of arithmetic and the substance of Euclid books I, II and III), geography (the world), the history of India, and drawing or the second vernacular.

II. Demand for teachers.

The number of teachers in vernacular primary and middle Number of boys' schools on the 31st March 1917 was approximately 24,000. trained teachers The rate of wastage, taken at 6 per cent. of this number, is about required. 1,400 per annum. New schools are being opened at a rate which requires about 1,000 additional teachers each year. Hence the total number of teachers now required annually is approximately 1,400 (for wastage) plus 1,000 (for expansion), i.e., a total of 2,400. In five years (i.e., in March 1922) the total number of teachers in vernacular boys' schools will probably amount to about 29,000.2 The wastage taken at 6 per cent. of this number, will be roughly 1,700. Thus in 1922 the annual demand for teachers will be approximately 1,700 (for wastage) plus 1,000 (for expansion) i.e., a total of 2,700.

¹ In the United Provinces there are two vernaculars, Urdu and Hindi.

² There is now (October 1918) under preparation a scheme of expansion which goes considerably beyond this number.

III. Supply of trained teachers.

Existing facilities.

Institutions for the training of teachers for vernacular boys' schools are of two kinds, training classes and normal schools.

Training classes are district institutions financed by the district boards; they train teachers for primary schools. In no district are there less than two training classes and in some districts there are as many as nine. There are at present 267 training classes in the 48 districts of the province. The course is for one year. The total number of students under training in training classes during the session ending March 1917 was about 1,810. Nearly 50 students each year enter normal schools after having passed through the training class course, and this number should therefore be deducted from the training class output. There is also wastage on account of permanent failures and withdrawals. A deduction of 10 per cent. would probably cover the wastage from all causes. Thus the an nual available output of trained teachers from training classes is at present about 1,630.

Normal schools are as a rule divisional institutions, financed from provincial funds; there are at present seven in the ten divisions of the province. They train teachers for middle schools, the staff of training classes, and a proportion of the headmasters of primary schools; a small number of their students find employment as teachers of vernacular in English schools. The course is for two years. The annual output (allowing for wastage, which is small) is about 300.

Are existing facilities sufficient for present needs?

Thus the output of vernacular trained teachers amounts to about 1,630 from training classes and 300 from normal schools, *i.e.*, a total of 1,930. We saw that the demand for trained vernacular teachers is about 2,400. Our present supply of trained teachers therefore is deficient by about 20 per cent. of the demand.

Extension of facilities for training.

It is not possible to increase the accommodation at the existing normal schools. The present enrolment is as large as is feasible from the point of view of providing practice in teaching. It has been suggested that the course might be reduced to one year. But there are objections to this proposal. It is impossible in less than two years to give youths who have passed only the vernacular final examination the necessary professional and literary training required to qualify them for service as teachers in middle schools. Moreover it is a great advantage to an educational institution to have a senior class to carry on from year to year the tradition of communal life. A single year's course makes any continuous tradition impossible. In this connexion it may be mentioned that a conference, summoned in 1910 by the London County Council to consider the question of the training of elementary teachers, reported as follows: "Actual experience proves that a two years course is not only twice as good as a one year course in the way of character building, but many times as good. The increased gain cannot be measured by the mere number of months."

It is proposed to increase the number of normal schools. Within the next five years at least four will be added. The estimated output from these is 140 per annum. Thus at the end of five years the total output from normal schools will be approximately 300 (present output) plus 140, i.e., 440.

In five years the total number of training classes may be expected, at the present rate of expansion, to reach 300. The maximum enrolment in a training class is eight. The number of training classes which admit the maximum number is increasing. At the end of five years the average enrolment for the province may be estimated as 7.5. This will give an annual output from training classes of 2,250, or, allowing for a wastage of 10 per cent., approximately 2,030.

Thus in March 1922 the total output of trained teachers will Position at probably be about 440 (from normal schools, plus 2,030, from train-the end of five years, ing classes), i.e., a total of about 2,470. We saw that the annual demand for teachers will then be approximately 2,700. Our supply will fall short of the demand by about 8 per cent., which is a considerable improvement on the present position.

Of the 24,000 teachers employed in vernacular boys' schools on Training of the 31st March 1917, 11,000 were trained. There remain 13,000 untrained teachers now in employment. Of these, 2,600 are employed in private unaided schools, which are rapidly being replaced by board schools. They are usually men with inferior qualifications which would not admit them to a training instruction;

¹ The new programme of expansion provides for an increase in the number of training classes to about 500 at the end of five years.

they may therefore be left out of account. We are thus left with 10,400 untrained teachers in board schools. Of these a considerable number are too old to train, and many have private interests which they are unwilling to forsake even for a year in order to undergo training. Probably it would not be an underestimate to put the number of 'trainables' from amongst the untrained teachers at about 6,000. It is customary for training institutions to admit teachers in preference to non-teachers; about 90 per cent. of the selected candidates are teachers. Hence it is probable that the majority of the present untrained 'trainable' teachers will in due course pass through a training institution.

Courses for untrained teachers.

The 'untrainable untrained' is not wholly ignored. According to the rules laid down for district boards, "At suitable times the deputy inspector shall convene meetings of primary school teachers who hold no certificate of a normal school or of a training class. He shall assemble not more than fifteen teachers in any ove meeting; no teacher shall be called to a meeting more than twenty miles from his school, and no meeting shall last longer than ten days. The deputy inspector, or, in his absence, the subdeputy inspector shall preside. At the meeting the president and a certificated teacher shall instruct the teachers in the simplest principles of teaching and school management and in matters having a direct bearing upon a teacher's work. The district board shall supply each teacher called to the meeting with a copy of the book on the principles of teaching and school management prescribed for use in training classes." The good resulting from these meetings varies according to the keenness and ability of the deputy inspectors, but, generally speaking, they fulfil a useful function.

1V.-Admission.

Qualifications for admission. Up to 1916 candidates who had passed the vernacular final examination in either drawing or the second vernacular were admitted to normal schools, but from July 1917 admission to (i) To normal normal schools (except the Almora normal school, which serves a purely Hindi speaking division) has been restricted to men who have passed the vernacular final examination with the second vernacular as their alternative subject; this condition ensures that

candidates admitted to normal schools shall have a knowledge of both the vernaculars used in schools.

In the case of training classes the minimum educational quali- (ii) To train fication for admission used to be the certificate of a primary ing classes. school. Experience, however, showed that such candidates were unable to profit by the theoretical instruction in a training class. Admission to training classes has therefore been restricted to men who have passed the vernacular final examination.

The most suitable applicants for admission to normal schools How selecare assembled by the deputy inspector and tested by a written tions are made examination in languages and arithmetic. To ensure a fair qualified care representation of Muhammadans the educational test is relaxed didates. in their case.

There is no written examination for selecting candidates for admission to training classes. Candidates are selected by the deputy inspector. Preference is given amongst acting teachers to men who have done good work in the schools; in the case of non-teacher applicants, the factors which determine selection are previous record at the middle school and personal appearance.

There are two main factors which determine the flow of Inducements teachers to training institutions—the prospects in the teaching to train. profession and the amount of stipend given to students in training.

In 1914, Sir James Meston, in reviewing the report of a (i) Improve. committee which was appointed to consider the means of extending ment in primary education, said: "The inadequacy of the present pay scale of salaries and the poverty of qualification in the present teachers in primary schools are admitted on all hands. A higher standard of intelligence and training, and consequently a decent living wage, are indispensable conditions of a living scheme of primary education. complete in itself and endowing the pupil with something of permanent value to him in after life. From whatever aspect the future of primary schools is regarded, it is certain that their staff will have to be better qualified and better paid." Accordingly the scale of pay recommended for teachers in vernacular schools has been improved. The scale is now as follows for trained teachers:-

Headmasters of middle schools. . A minimum of Rs. 30 per mensem. Assistants in middle schools . . Rs. 12 to 25 per mensem.

	. Ks.					
	(30 per cent on 14 per mensem.					
Headmasters in primary schools	-) 40 ,, ,, ,, 16 ,,					
readinasters in primary sensors	$\left(\begin{array}{cccccccccccccccccccccccccccccccccccc$					
	(10 ,, ,, ,, 20 ,,					
	$\begin{cases} 40 & ,, & ,, & 10 & ,, \\ 50 & ,, & ,, & 12 & ,, \end{cases}$					
Assistants in primary schools						
	(10 ,, ,, ,, 14 ,,					

For want of funds the district boards have not been able to put this scale into complete operation; but they are aiming at it and this fact has probably increased the number of applicants for admission to training institutions. There is at present no dearth of applicants for admission to normal schools, and, generally speaking, candidates are forthcoming in sufficient numbers for training classes. Most inspectors, however, are of opinion that the starting pay of primary teachers is not high enough to ensure a steady flow of suitable recruits to the profession and recommend Rs. 12 as the minimum. Thus the inspector of schools, Lucknow, says: "Considering that unskilled labourers in Lucknow get about five or six annas a day and slightly skilled ones get more and that the earnings of ekka walas and thela walas are much higher than the earnings of a teacher, the attractions offered for the encouragement of training are hardly sufficient."

(ii) Stipends.

Where there are difficulties at present in securing candidates, the reason usually given is the small amount of the stipend. In normal schools this is fixed at Rs. 8 per mensem, which is adequate. In training classes the stipend is only Rs. 6.1 There is no doubt that this is too little. The chairman, district board, Kheri, writes: "Pupil teachers receive only Rs. 6 a month, which is insufficient to support them while away from their homes. Their former, by no means high, standard of living is suddenly reduced and while under training they have of course no opportunities of adding to their income such as they undoubtedly enjoy and generally utilize while employed as teachers." The inspector of schools, Lucknow, says: "I believe at least about 60 per cent. of the pupil teachers are married men and perhaps 20 per cent. of them join the training class after they are fathers of children.

¹ The question of increasing the stipend at training classes is under consideration it is proposed to raise it to Rs. 8 per mensem and to depute acting teachers on full pay, with an extra allowance of Re. 1 per mensem.

Such men certainly try to avoid going to the training class. I think the rate of stipend ought to be increased to Rs. 8 per mensem."

Most inspectors and headmasters agree that men who have Is previous served for two or three years as teachers form the best material experience in for training; they have acquired confidence in facing a class and, able? knowing something of the difficulties of teaching, they appreciate the guidance of the training class or normal school. Also the risk of mistakes in selection is less in the case of teachers. Thus the inspector of the Kumaun Division says: "Teachers are generally preferred as candidates for training. It is considered a decided advantage to have the opportunity of seeing how a man is shaping as a teacher in actual practice before he is definitely selected for training." In the United Provinces about 90 per cent. of the students in training are men with some previous experience. The great majority have served in board schools, a few have gained their experience in aided schools and a few have been deputed from schools in native states. Thus of the 111 students in training at the Moradabad Normal School 102 have had previous teaching experience—94 in board schools, 5 in aided schools and 3 in native states.

Admission to normal schools is restricted to men who are Age of adunder 25 and not less than 16 years of age. In the case of training classes preference is given to men under 25, but "in default of candidates under 25 years of age vacancies may be filled by those who are under 30 years of age." It is generally agreed that the most suitable age is from 20 to 25. Men under 20 lack ballast, and men over 25 have got out of the way of studying and into grooves from which they are reluctant to move.

Students admitted to normal schools and training classes must Agreement. sign an agreement to the effect that they will serve for three years in a recognized school in the United Provinces; in default of such service they must refund the total amount received as stipend while under training.

V.-Relations between normal schools and training classes.

It has been pointed out that about 50 students each year enter Admission of normal schools after having passed through the training class passed men to course. This looks like a wasteful employment of two distinct normal schools agencies. But it is a legitimate ambition for students of training

classes to aim at the higher certificate. Several plans have been proposed with a view to enabling the best of the training class men to go on to the normal schools. One suggestion was to reduce the course in normal schools to a single year and to reserve these schools entirely for the pick of students who have already passed through the training classes; another was that there should be an alternative one year course in normal schools for the benefit of such students; and yet a third was to admit training class passed men into the second year class of the normal school. To all these proposals there are objections: To the first that it would mean a considerable reduction in the total number of trained teachers annually turned out, to the second that it would introduce difficulties in the organization of the work in normal schools, to the third that it is undesirable to interject students into the middle of a course. On the whole the third proposal seems the most feasible; the main objections to it can be met by limiting admissions of training class men by means of a competitive examination and by prescribing for this examination the work done in the first year of a normal school. But, in the opinion of Government, a scheme of this kind should be postponed for the present. "It would undesirably reduce the number of normal trained men. It will be time enough to experiment with it, if at all, when the educational department has overtaken the demand for head teachers "

VI.—Inspection.

Special insclasses.

In 1907 the normal schools and training classes were for pector of normal schools purposes of inspection placed under a special inspector, designated and training the inspector of normal schools and training classes. At first this appointment served a useful purpose. The inspector organized the work in normal schools and training classes and gave a stimulus to training throughout the province.

Objections to the appoint. ment of a special inspector.

Experience has shown, however, that a post of this nature outgrows its usefulness and may even be an obstacle to progress. The increase in the number of training classes has rendered their inspection by one officer a physical impossibility. The more conscientiously the inspector tries to do his work, the greater becomes the physical strain, and the less leisure has he to enable him to keep in touch with modern developments in education.

Accordingly he is apt to get into a groove, and there is a tendency for his inspection to reveal itself in the impress of stereotyped formulæ on the training institutions. He also gets out of touch with the general progress of the administration, and when this happens his influence for good declines. An unforeseen result of the appointment of a special inspector has been that the responsibility of the ordinary inspecting staff for seeing that the normal schools and training classes are working properly has been weakened. Moreover the divisional inspector and special inspector have not always been in agreement on questions of method and time-"It would be undesirable," says an inspector, "to make an inspection book the theatre of controversy, in case opinions of inspectors differ. It certainly would be embarrassing to the district inspecting staff, who have to make arrangements to try to follow two masters. Again in case the divisional inspector desires to press his own individual views there would be a conflict of authority, which in the interests of good administration is to be deprecated."

A recent conference of inspectors discussed the question and Proposed new passed the following resolution:

inspection.

"A special inspector is no longer needed for the inspection of normal schools and training classes. The inspection of training classes should be left to the ordinary inspecting staff. The ordinary inspection of normal schools should be conducted by inspectors and assistant inspectors, and once every three years a specialist should he deputed to visit and report on each normal school." conference was of opinion that the assumption of full responsibility for training classes by inspectors would vivify their interest in these institutions, and that inspection of normal schools by specialists (e.g., the staff of training colleges) would carry weight and inspire confidence.

The Normal School.

I.—Theory.

The object of the course in subject matter is to ensure that subject teachers have the indispensable equipment—a knowledge of what matter. they are to teach. Accordingly while under training they are taught the vernaculars, mathematics, history, geography, nature

study, drawing, and physical exercises. Except in languages the courses in these subjects do not extend beyond the syllabus prescribed for the vernacular final examination, which all students have passed before entering the normal school. The subjects, however, are taught from the point of view of their presentation to pupils and the study is more thorough than in the middle school. This revision and consolidation of knowledge previously acquired is found to be necessary.

The primary education committee, which met in 1913, reported that teachers were "especially weak on the language side." Accordingly stress is now laid on a thorough study of languages, and the normal school course in these carries students considerably beyond the stage of the vernacular final examination. An effort is being made to encourage students to continue their study of language even after they take up appointments. Thus it is proposed to institute special language examination teachers and to take the results of these into accour rexamination regarding pay, appointment, and promotion. In the first

The nature study course is in abeyance. At pres parament, a no teachers on the staff of normal schools who are point to the staff of normal schools teachers who have been through a special course in nature study at the Training College, Allahabad.

The course in physical exercises consists of the middle school course of desikasrat, revised with special reference to teaching it to pupils, with additional bar exercises. In all the normal schools football and hockey are played, but are not compulsory.

The courses in educational theory are as follows:-

Professional training.

Methods of Teaching.—The methods of teaching the following subjects in vernacular schools:—Languages (reading, spelling, writing, grammar and composition), history, geography, arithmetic, geometry, object lessons, drawing, physical exercises.

School and Class Management.—Preparation of time-tables; home-work; discipline; qualities of good teaching; notes of lessons; questions and answers.

Physiology.—Brief description of the human skeleton and the muscular system; the circulation of the blood; brief description of the nervous system; the digestive organs; the organs and mechanism of respiration; the structure of the eye and ear.

Hygiene.—Lighting and ventilation of the class-room; physical exercises; eye-sight and hearing; causes of mental fatigue; common infectious diseases—their signs and prevention; simple casualties; water, air, and food with reference to their purity.

The Vernacular School Manual.—This book is a reprint of the part of the educational code which relates to vernacular schools for boys.

The text-book prescribed for methods of teaching and school management is Richey's Manual of Teaching in Urdu and Hindi. This book was written for teachers in primary schools and accordingly it does not include an account of the methods of teaching history and geometry, and its treatment is too elementary for teachers in secondary schools. But it has been written with to press. A book on similar lines, but more advanced, is authorized, where

deprecated." In physiology is designed to give students a A recent garding the structure of the body, to serve as a basis passed the factor in hygiene; a text-book is under preparation. Selected masters from the staff of normal schools were sent last year to the Training College Allahabad for a special course in physiology and hygiene.

II.—Practice.

Until recently the work in practical teaching at the normal schools has been far from satisfactory.

It was insufficient in amount; the average number of hours Amount of of practical teaching in two years was only 50. In England the practical minimum amount is 120 hours for a two years' training course. The main reason for the small amount of practical work was that the normal schools used for practice by students only one school, the attached 'model school.' There is a limit to the amount of 'practice' which can be tried on a school—especially one that enjoys the epithet 'model.' Even 50 hours per student in two years meant that one-third of the teaching in the model school was done by students in training. Arrangements have now been made for increasing the amount of practical teaching by utilising, in addition to the model schools, primary and middle schools in the vicinity of the normal schools. In this connexion it is

important to remember that the site for a training institution should always be chosen with reference to facilities for practical work. This has not always been done in the past; thus in one particular case the normal school was established in cantonments on an admirable site from the hygienic point of view, but over a mile from the nearest school, with the result that it was difficult to arrange for more than 15 hours of practical teaching per student per annum.

Supervision of practical teaching.

Another weakness in the practical work was that it was inefficiently supervised. The main cause was the inadequacy of the staff, which for an enrolment of 100 studends in training was fixed at six masters (excluding the teacher of physical exercises). The staff was almost wholly employed in theoretical instruction. The supervision of practical teaching devolved upon the masters of the practising school. This arrangement was satisfactory on paper but proved a failure in actual working; instead of systematic training in how to teach there was merely practice in teaching. The masters in the practising schools were men whose qualifications were no higher than those of the students in training; accordingly they were too diffident to offer detailed constructive criticism. Their criticism was of a feeble character; it consisted of brief vague comments (e.g., 'Your method is fair but your questions are unsatisfactory') interspersed with hackneyed pedagogical formulæ.

Proposed increase of staff in normal schools. It has therefore been proposed to increase the staff in normal schools from six to eight masters (excluding teachers of physical exercises) per 100 students. This estimate was arrived at after a scheme (to be presently described) had been worked out for the better organization of the practical work. It receives support from the following estimate to be found in the proceedings of the joint committee (1897) on the training of teachers in England: "The general opinion of those who have had experience in the training of secondary teachers gives from eight to twelve as a fair number of students per member of teaching staff." Our estimate is twelve students per member of the staff, and, it may be noted, student-teachers in India require considerably more individual attention than English students, who have in most cases been trained from their youth upwards to

think for themselves and in their school days have usually had before them the example of good teaching.

Excluding periods for revision of work and examinations there Proposed orare at least 180 working days in the session of the normal school ganization of This total number of working days will be divided into three periods teaching. of 60 days each. The 100 students will be divided into 9 batches of approximately 12 students each. For the first period of 60 working days, batch no. 1 will teach daily in the first hour, batch no. 2 in the second hour, batch no. 3 in the third hour; at the end of 60 working days batch no. 1 will be succeeded by batch no. 4, no. 2 by no. 5, and no. 3 by no. 6; at the end of 120 working days batch no. 4 will be succeeded by no. 7, no. 5 by no. 8, and no. 6 by no. 9. The classes assigned to the men of each batch will usually not be the classes taught by their predecessors, and the practical work will be so distributed over the practising schools that no particular school will have an undue share.

The 'hour' above mentioned will really be 45 minutes, the Amount of length of a school lesson. Thus each student in the course of ching per a session will have 45 hours of teaching per session, or nearly student per session. double the amount formerly prescribed.

According to the above scheme twelve students will be simul-Staff required taneously engaged in teaching different classes during each of for supervithe first three hours of the school day. To supervise twelve tical teachers simultaneously engaged in 'practice,' at least two members of the normal school staff are necessary. The supervisors will give on an average about eight minutes to each student daily (or, what is better, about sixteen minutes to each student every second day), and in addition will correct notes of lessons and periodically collect student-teachers together to discuss common faults.

It has been pointed out that the teaching of students will Distribution be distributed over the practising schools. It is desirable, how-of practice amongst pracever, to restrict the number of schools in use at the same time tising schools. to two and to put one supervisor in each. If the classes are scattered time will be lost by the supervising staff in going to and fro.

We are aiming at each student doing 60 periods (each of three Distribution quarters of an hour) of teaching per year. To give him practice with of student-teadifferent classes and different subjects, it is proposed to divide his classes.

total of 120 periods into five or six spells, each consisting of about 20 consecutive lessons to the same class. In some normal schools it was until recently the practice to change the class and teacher about every eight or nine days; the teacher no sooner got to know his boys than he left them.

leaching of ombined lasses.

It is frequently necessary for a teacher to have to take two classes, perhaps owing to a shortage of staff in the school, or to the temporary absence of a colleague. We prepare students to meet the difficulties involved in this double duty by requiring each to give at least fifteen lessons to combined classes.

otes of

One of the common criticisms brought against training institutions of all kinds is that the 'notes of lessons' in vogue are too elaborate. This criticism is frequently justified. In vernacular training institutions especially the 'notes of lessons' are often apparently written with the sole aim of producing a manuscript which is beautiful to look upon. More time is given to elaborate ornamentation than to thought regarding the matter and its presentation to a class. The notes are also often too long and thus tend to make teaching mechanical, for in few lessons is it possible to keep to the precise details of arrangement and procedure which have been prepared in advance; the unexpected is always cropping up. The late Mr. J. N. Fraser of Bombay, writing on this subject, remarked: "Very long notes of lessons are a bore and the preparation of them makes teachers weary of the work before they begin it. They should always remain a means, not an end. The end is progress on the part of the boys; and this is to be secured by coming into the class with a fresh elastic mind, not by bringing too elaborate notes and a mind impervious to impressions." Notes of lessons in a training institution are necessarily more detailed than those which an ordinary class teacher would make. They serve the purpose of aiding the student teacher and of showing the supervising staff how the lesson is intended to be developed; whereas in actual practice a teacher makes notes solely for his own reference. But even with this double aim in view the notes need never exceed one page of foolscap, and when several lessons are being given on the same topic they can gradually be reduced to less than half that length. Orders have recently been issued to the headmasters of normal schools that "notes of lessons should

be brief records of the procedure to be adopted; they should be neatly written but without the elaborate use of rulers and coloured inks."

Another feature of training institutions which sometimes Criticism degenerates into an artificial rite is the 'criticism lesson'. A lessons. recent report on the training of vernacular teachers in these provinces describes one as follows: --

" As usually conducted the teacher gives an isolated lesson to a handful of little boys; the lesson is given before his fellow students and the headmaster, to whom he first submits a copy of 'notes of lessons' in which he surpasses himself in the manipulation of ruler and coloured inks. At the end of the lesson some students are called upon to criticise the lesson and finally the headmaster sums up with a few remarks. The whole proceeding lasts about half an hour. As there are usually not more than six boys in the 'class' there is little to criticise under the head 'class management,' and accordingly the comments are confined to points of method. The students' criticisms are of little value: they lose themselves in side issues."

As a consequence of this report orders have been issued as follows:-"The criticism lesson should be expository rather than critical; the headmaster should use it as the text for a lecture to be given on the same day at some subsequent period. His criticism should be constructive and should cover such points as the special methods of the subject, the suitability of the subject to the class, discipline and class management. The lesson should not be isolated, but should be one of a series which the teacher is giving in the practising school; it should be given to a full class."

The observation of good teaching is a feature of training Demonstrainstitutions in England. "It is expected," says the Board of tionlessons. Education, "that satisfactory provision will be made for enabling students to see work done by teachers of special competence and experience." The value of demonstration lessons has not until recently been fully recognised by our normal schools, but now there are at least six a year in each subject of the curriculum; these lessons are given by members of the normal school staff.

Under the scheme of practical teaching now being introduced rime-table. about one-third of the students will be absent daily from the

normal school for some part of the forenoon—twelve for the first hour, twelve for the second, and twelve for the third. They will thus miss some of the work being done at the normal school in the forenoons. To meet this difficulty the normal schools devote the forenoons to 'subject matter', criticism lessons, and demonstration lessons, and confine instruction in professional subjects (methods of teaching, school management, etc.) to the afternoons. The 'subject matter' is mainly revision of the middle school curriculum, and therefore students can get up for themselves what they miss by absence from classes; criticism and demonstration lessons are well distributed over the session and thus every student can attend a reasonable number.

III .- Methods of teaching.

The methods of teaching in normal schools are not all according to one pattern, but the following may be taken as typical of various lessons:—

Urdu or Hindi text.

The piece prescribed for the day's lesson is read by the pupils individually, paragraph by paragraph. The teacher criticises the reading and if necessary gives a model reading.

After a paragraph has been read difficulties of vocabulary or construction are elucidated. The class is then questioned on the sense of the passage as a whole.

Sometimes the class is required to give in writing the summary of a passage.

History.

At the beginning of the lesson the teacher gives a brief introduction to connect the facts of the new lesson with the previous course of events.

A summary of the important facts of the lesson is got from the pupils, who usually 'prepare' the lesson at home. The teacher amplifies this summary, and by questioning brings out the causes and consequences of events. He uses illustrations, e.g., sketch maps and pictures, when possible.

The important facts of the lesson are summarised on the black-boards.

An outline map is drawn on the black-board; the pupils copy Geography, this in their note-books.

The facts of the lesson are given by the teacher with reference to a wall map or to sketch maps on the black-board. Questions are put to bring out the reasons for statements and to compare or contrast new facts with facts previously taught. The sketch map is used to summarise the essential facts of the lesson.

Physical geography is taught in separate lessons but the principles of physical geography are applied in all lessons as far as possible.

The teacher begins a new process by oral examples worked also Arithmetic. at the black-board. By examining the steps of the process in a number of examples the pupils are led to state the 'rule.' The rule is then applied to more difficult examples, both oral and written, finally it is applied to problems whose solution requires a know-ledge also of rules previously taught.

The course in formal geometry is preceded by a course of Geometry. experimental work. The object of the latter is to lead the pupils to discover for themselves the significance of terms and the properties of figures by series of simple experiments. In this preliminary work importance is attached to neatness and accuracy. The course in experimental geometry is followed by a course of formal propositions, theorems and problems. These are solved first as 'riders', but the proofs are finally learned with steps arranged as in the text-book, but with the figure in a different position and with different letters. The propositions are applied to the solution of 'riders'.

IV .- Examination.

The certificate granted to teachers trained at normal schools is called the *Vernacular Teacher's Certificate*. The examination is in two parts, theory and practice.

There are eight papers in theory. They are the same for all Theory. normal schools and are set and marked by examiners appointed by the Director of Public Instruction. The following statement shows

the length of the papers and the maximum and minimum marks;—

No.	Subject.	Time in	Marks.			
	Subject.	hours.	Maximum.	Minimum.		
	First Language:					
1	Literature and Grammar		3	50		
2	Unseen and Composition	, ,	3	50		
	Total	ı .		100	35	
	Se cond Language.					
3	Literature and Grammar* .	•	3	5 0	! !	
4	Unseen and Composition* .		3	50		
		,				
	Total			100	35	
5	Arithmetic, Geometry, Algebra.	•	3	100	33	
6	History and Geography		3	100	33	
7	Physiology and Hygiene		3	100	33	
8	Methods of Teaching and S. Management.	school	3	150	. 52	

There is no written examination in nature study. Fifty marks are allotted to the subject; these are awarded by the headmaster on the student's record of work. This procedure has been adopted in the case of nature study as it was thought that an external written examination would tend to make teachers emphasize the value of information at the sacrifice of right methods of study.

Practice

The examination in practice of teaching consists of three parts:—

- (a) Class teaching.
- (b) Drawing.
- (c) Physical exercises.

^{* 10} marks in each paper are reserved for penmanship.

It is conducted by a board of three members, appointed by the Director of Public Instruction for each normal school. Formerly the inspector of normal schools was president of all boards, and the other two members were appointed locally for each normal school. If the post of inspector of normal schools is abolished it will be necessary to revise the constitution of the boards. A suitable board would be: A lecturer from a training college (president of all boards) with an assistant inspector of schools and headmaster of a high school as colleagues; the two latter might be appointed locally.

The headmaster of the normal school submits to the president Class teachof the board at least one week before the date of the practical ing. examination a list of three lessons (one on language teaching, one on mathematics, and one on some other branch of the curriculum of vernacular schools) for each candidate. The president then selects from the list one lesson for each candidate; he gives the headmaster at least twenty-four hours notice of his choice.

On the day of the examination the headmaster places before the board a list of candidates arranged alphabetically in four divisions, according as in his opinion, on the record of their work done as students, they are 'first class', 'second class', 'third class', or 'failures' respectively. The board then hears each candidate give a lesson. These lessons must be full lessons, but three or four may be given simultaneously by candidates to classes in different rooms, the members of the board moving from room to room. If the board accepts the headmaster's opinion it records this opinion as the result of the examination; if it does not accept his opinion in any particular case it calls for a second lesson and then assigns the candidate finally to one of the above four classes.

The system described above has been only recently adopted. Formerly the headmaster's opinion was usually not taken into consideration, and the teaching abilities of candidates were assessed as a percentage of marks by an examiner who heard individual lessons, which seldom lasted more than fifteen minutes. This procedure was obviously artificial. It is impossible for any one to estimate as a percentage a candidate's skill as a teacher, by hearing a single lesson. Moreover a test of this kind is a formal piece of isolated teaching; it has been well described as being to the actual work of the class-room what the dress

parade is to warfare. The only one competent to pronounce a decided opinion on the candidate's powers as a teacher is the headmaster who has seen him from day to day under ordinary school conditions. If he is not fit to give this opinion he is not fit to be headmaster.

Drawing and physical exercises.

The examination in drawing and physical exercises is conducted on the same principle as the examination in class-teaching; but all students are examined simultaneously. The headmaster of the normal school classifies the candidates into four divisions, as in the case of class-teaching, according to the record of their work as students. The board nearly checks his classification. If the board is unable to accept the headmaster's opinion in any particular case, it sets an additional individual test in this case and then gives a final decision. The test in drawing consists in drawing some common object on the black-board. In testing the candidates in physical exercise the board first sees all candidates perform as a class some exercises in desikasrat, and in doubtful cases requires candidates to drill a class.

Conditions for passing. Candidates are required to pass in class teaching and in each branch separately of the examination in theory, as shown in the statement of minimum marks given above; but a candidate who fails in any part of the theoretical examination may be re-examined in the subjects in which he has failed, provided he re-appears for examination within three years of leaving the normal school. Candidates who pass are classified in theory as follows:—

certificate.

The certificate shows the results of the examination in theory and in each branch of practical work, as follows:—

If the candidate fails in drawing or physical exercises he is granted a certificate, provided he has passed in theory and in class-teaching; but his failure in drawing or physical exercises is recorded on his certificate by a line drawn through the space for 'class'. He is, however, allowed to appear for re-examination in

drawing or physical exercises at any examination held within three years of his leaving the normal school; if he then passes an endorsement to this effect is made on his certificate by the inspector.

On an average about 85 per cent. of the candidates obtain Results. the certificate. The majority of failures are in theory. As failed candidates are allowed to re-appear in the subject in which they fail, the number of permanent failures is probably not more than five per cent.

V.—Staff.

The following is a typical normal school staff:—

No.	Designation.		Qualifications.		Pay per mensem.	
1	Headmaster	•	Trained graduate	•	•	Rs. 175
2	First Assistant .		Intermediate, trained .			85
3	Second , .		Matriculation, ,, .			5 5
4	Teacher of Urdu .		Trained at a Normal School		•	4 0
5	,, ,, Hindi		رو دو دو دو			40
6	" " Drawing		" " an Arts School		.	40
7	, ,, Physical Exercises	٠	", ", a Normal School		•	20

This staff is too weak for the work entrusted to it. In England the Board of Education requires that at least two-thirds of the teaching staff in elementary training colleges should be graduates. We might reasonably aim at about the same proportion. The writer suggests the following staff:—

No.	Designation.			Designation. Qualifications.							St st
1	Headmaster .		•	Trained	graduat	e .	•		•	Rs. 200	-
2	First Assistant		•	"	• *,			•	•	150	
3	Second "			**	**	•		•	•	120	

Suggested.

No.	I	esignation.			Qualifications.					
*4	Third A	ssistant	•	Trained	Trained graduate .				Rs. 100	
* 5	Fourth	,, .		,,	**			j	80	
в	Teacher	of Urdu		Trained	l at a Norm	al School	•	,	40	
7	,,	" Hindi		7)	11 15	,,			40	
8	**	" Drawing	; .	, ,,	" an Arts	School			4 0 ·	
9	,,	" Physical Exerc		,,	" a Norm	at School	•		30	

The total cost of this staff would be Rs. 800 per mensem. To compare this with the cost of the present staff we must add to the latter two assistants (for the supervision of practical teaching) on the present scale, say one on Rs. 70 per mensem and one on Rs. 60 per mensem, making the total cost of the present staff Rs. 585 per mensem. The difference between this and the proposed cost is only Rs. 215 per mensem. No money is put to better use than what is spent in order to staff normal schools with teachers of the right stamp; their influence permeates not only to middle schools but also through the headmasters of training classes (who are trained in normal schools) to all the primary schools of the province. As the Times Educational Supplement said recently: "The elementary training colleges supply the point at which official influence can be most effectively brought to bear upon the daily work of the schools. The young teachers in training are caught at their most susceptible period, so that the educational authority that is skilful enough to manipulate its training college staff can exercise an enormous influence on the discipline, methods and spirit of elementary schools."

Promotion of ıtaff.

The normal school masters are recruited from the staff of tormal school English schools, and for purposes of pay and promotion are graded with teachers in these schools; thus transference from school to training work is facilitated and promotion amongst normal school masters is more rapid than it would be were there a separate cadre for them.

^{*}Proposed additional staff for supervision of practical teaching.

VI.-Cost.

The following is a typical year's budget for a normal school Normal school with 100 students .-

							Rs.
Stipends, 100 at Rs. 8 pe	r me	nsem	for 12	mont	hs		9,600
Servant, 1 at Rs. 8 per m	ense	m for	.12 m	onths			96
Servants, 4 at Rs. 6 per n	nense	em fo	r 12 n	onths	•	•	288
Travelling allowance		•			•		200
Purchase of books .	•		•		•		120
Purchase of prizes .		•					25
Supply of free light to be	oarde	er's				•	300
Contingencies (stamps, ra	ites a	ınd ta	xes, 1	unkal	1 cool	lies,	
country stationery, pur	rchas	e and	repai	rof f	urniti	ıre,	
garden charges, pay of	swe	epers)).				1,600
				T	otal		$12,\!229$

Adding Rs. 585 × 12 for the staff, the total annual cost is Cost of approximately Rs. 19,000, or Rs. 190 per student under training. producing a trained Thus, as the length of the course is two years, the cost of teacher. producing a trained teacher is Rs. 380.

Training Classes.

In 1876 the pupil-teacher system was adopted in the United The pupil-Provinces. Under this system a candidate for a teachership system. spent a year partly in study and partly in teaching, under the supervision of the headmaster of a middle school.

The main objection to this system was that the headmaster had Objection to not the time necessary to give instruction to and supervise the the pupilwork of the pupil-teacher. The latter in fact had to try to system. learn how to teach as one usually has to learn how to swim, merely 'by practice'; there was little intelligent criticism or guidance.

It was decided therefore to form the pupil-teachers into small The establishclasses, not exceeding six-now eight-in number and to place ment of traineach of these classes under a special master, called 'the instructor', who would be responsible for their instruction and training. These classes were called training classes. The instructor was under the supervision of the headmaster of a middle school and the training class was usually accommodated either in the

building of the middle school or in an annexe to it. The pupilteachers were responsible for the teaching of the infant classes A and B, and standards I and II of the primary school which was attached as a feeder school to the middle school.

Advantages and disadvaning classes.

Training classes multiplied rapidly and are now the main tages of train-source for the supply of trained teachers to primary schools. They are cheaply established and cost little to maintain; they attract teachers who would not be willing to travel any considerable distance from their homes for training, they keep alive the interest of local authorities in training and they distribute the cost of supplying teachers equitably amongst the district boards. On the other hand it must be recognized that the training they give is in some respects inferior to that of a normal The outlook of teachers who have never left their own district is narrow, the class is small and therefore the students have little opportunity of emulation amongst themselves, and, pointed out when the system was first established, they have not the advantage of "contact with the superior experience and intelligence possessed by a normal school staff, or of personally becoming acquainted with the samples of school apparatus and methods of instruction which normal schools are intended to illustrate."

Committee on the training of vernacular teachers.

In 1915 a committee was appointed to consider the whole question of the training of vernacular teachers in the United Provinces. This committee carefully enquired into the working of training classes. While it found weaknesses it was of opinion, having regard to financial considerations, that the system was the only one at present practicable for the training of the large number of teachers annually required for service in primary schools. and that, although inferior in some respects to normal schools. training classes are capable of giving a training which well serves the end in view. The committee made detailed suggestions for improvement in their working. In order to explain clearly the purport of these it will be necessary first to point out the defects revealed by the committee.

Defects in the avstem. (i) Pupil. worked.

The pupil-teachers were entirely responsible for the teaching of the four 'lower primary' classes which constituted the practeachers over-tising school. Besides being the staff of the school they were also students preparing for an examination which entailed hard study;

Scale 10 = 1. TYPE PLAN FOR A TRAINING CLASS. Hd. Master's Training Class Practising School Practising School Practising School Room and Class Room Class Room Class Room Class Room Library /8 × 15 18' X 20' 18' × 20' 18' × 20' 18'X 12' Covered Pussage 7'X20' Covered Passage 7'X20' Practising School Practising School Verandah Verandah Class Room Class Room -10' /8' X 20' 18' X 20'

they were therefore overworked. Thus the deputy inspector of Cawnpore reported: "There is a general impression that work in the training class is extremely hard without a corresponding material gain. Recently in a class of pupil-teachers the idea gained ground and they conspired to leave the class in a body. In several cases those who have come to the class quite willingly, rather zealously, have resigned on one excuse or another. Secret enquiries have, however, led to the conclusion that hard work in the class is the main reason for such an extreme step."

The usual method of allotting work in the practising school (ii) to eight pupil-teachers was to divide the four classes A, B, I, and ent II each into two sections, thus providing eight classes. These classes were taught simultaneously. The instructor could see each class on an average for only about five minutes in a lesson period of three quarters of an hour. Not infrequently he confined his supervision to seeing that the classes were kept at work. One inspector comments thus on the supervision exercised by the instructors of his division: "I have seen this very effectively and helpfully done in one instance, but I have generally derived the impression that nigrani is interpreted rather casually, and it tends to be leafing while you watch others work, instead of guiding, helping, and keeping up to the mark."

supervi

In order to receive instruction in theory from the instructor, (iii) Eviguous the pupil-teachers had to be relieved of their duties as teachers classes in the for part of the day. This was done by dismissing the school practising classes at about 12-30. The practising school was thus only a ' half-time' school and was therefore unpopular with parents, who in any case grumbled at their children being taught exclusively by a succession of inexperienced youths. Accordingly the enrolment of the practising schools was small. The 'classes', when divided into sections, frequently consisted of a miscrably small handful of five or six boys, so that the pupil-teachers got no practice in handling classes of ordinary size.

A primary school consists of six classes A, B, I, II, III, and (iv) No practive IV, but the practising school comprised only the first four. The tice with the lower primary has ceased to be a recognised stage in the system of a primary of elementary education; the view of Government is that a school. school "ought not to be called a primary school until it comprises class IV." The corollary follows that the practising school used for the training of primary teachers should contain classes III and IV.

(v) Dominated by the middle school.

Each training class was under the control of the headmaster of a middle school. The headmaster naturally gave most of his time and thought to the middle school for which he was directly responsible. His control over the training class was often little more than nominal, but it was sufficient to deprive the instructor of the incentive and authority to organize the practising school in the way that seemed to him most likely to make it a model of what a primary school should be.

(vi) Inadequate accommodation.

The accommodation was often so inadequate that three or even four classes were taught in the same room.

Minor defects.

There were other defects of a minor character. The pupil-teachers wasted much time in making 'fair copies' of work done in class; these were elaborately ruled with coloured inks and ornamented with beautiful headings. Thus one inspector remarked, "The note-books of the pupil-teachers are beautiful to look upon, and one is led to recall the headmaster who remarked to his sixth form that their note-books were full, their heads empty and their self-content perfect." Following the lead of the normal schools the instructors attached great importance to length and ornamentation of 'notes of lessons', and the criticism lessons in the training classes were conducted in the same artificial manner as in the normal schools.

Reforms.

As a result of the recommendations of the committee referred to above the training class system has been overhauled. Improvements on the lines explained below are now being carried out.

The training school.

The practising school will in future be a self-contained full primary school, independent of a middle school; it will be called a training school. The permanent staff of the training school will be a headmaster and two assistants, all trained. The term 'instructor' will disappear. Each training school will admit candidates for training up to a maximum of eight; their time will be occupied partly in teaching and partly in study under the supervision of the headmaster and his two assistants. As funds become available the training school will have its own building independent of a middle school.

The following time-table has been issued for guidance of train-Organization of a training schools:—

10-12-15.—(a) Teaching of classes A, B, I, II, and III (or IV) by · five pupil-teachers, supervised by the headmaster. and of class IV (or III) by one of the permanent assistant masters. Training Class (b) Study by the remaining three pupil-teachers, of the 'subject matter' part of the course for the certificate under the supervision of the other and Practising School. permanent assistant master. 12-15-12-45.- Interval. 12-45-1-30.-As above for period 10-12-15. Training 1.30-3. - Instruction in 'theory' of eight pupil-teachers by the school. head master. (1-30-2.—Physical exercises, taught by the two assistant masters (infant classes A and B to be dismissed at 2). Practising 2-3.-Teaching of classes I and II, combined, by one assistant School. master and of III and IV, combined, by the other assistant master.

According to the above scheme five pupil-teachers will be Amount of teaching simultaneously, the remaining three being engaged in 'practice' study. The length of the session is forty working weeks. The teachers practical work can be organized as shown in the following table, where 'period' means a period of five weeks continuous teaching and the numbers 1 to 8 stand for the names of the eight pupil-teachers:—

Period.	ι	11	III	IV	v	VI	VII	VIII
A	1	6	3	8	5	2	7	4.
В	2	7	4.	1	G	3	8	5
I	3	8	5	2	7	4,	1	6
II	4	1	6	3	8	5	2	7
III or IV	5	2	7	4,	1	6	3	8

Thus each student will get 25 weeks practice of three hour daily, i.e., a total amount of about 450 hours in the year. This although less than under the former system which required each pupil-teacher to teach continuously throughout the whole year, wil produce better results; the pupil-teachers will now teach ful classes and will be more carefully supervised by the 'instructor', as there will be only five pupil-teachers teaching simultaneously.

Preliminary instruction of pupilleachers.

It is an advantage to the practising school and a help to the pupil-teachers if the latter receive some instruction in class management and methods of teaching before they commence 'practice'. It is proposed to arrange for preliminary instruction of pupil-teachers by keeping on at the training school two students each year for a month after they have passed the certificate examination; they will be appointed to primary schools but will be deputed for a month to the training school to assist the permanent staff in teaching the classes of the primary school. This arrangement will give the new batch of pupil-teachers a preliminary month free from teaching: they will spend their time watching the lessons given by trained teachers and will thus learn something about methods of teaching and class management before they take over the classes. The above estimate of forty working weeks allows for a month being spent in this way.

Feaching combined classes.

Course in theory.

(i) Subject

matter.

(ii) Profesional trainng.

taff.

Each pupil-teacher will be required to put in at least fifty hours practice in teaching two classes simultaneously.

The theoretical part of the course of a training class is, like the normal school course, in two parts (i) subject matter, and (ii) professional training.

The course in subject matter consists of a study of the vernaculars, carried well beyond the stage of the vernacular final examination, and a revision of the middle school course of arithmetic, geography, drawing, and physical exercises. It is intended to add nature study to the curriculum when the normal schools begin to turn out qualified teachers.

The course in methods of teaching and class management is defined by reference to two elementary text-books (Risala-i-Talimo-Tarbiyat Part I, by Pandit Iqbal Kishen, or Hadi-ul-Mudarrisin, by Lala Ladli Das).

As mentioned above the permanent staff of a training school will consist of a headmaster and two assistants. They will all be trained teachers, and the headmaster at least will be normal school trained. The headmasters will be men of proved capacity. Usually they will be selected from middle school assistant teachers, and will never be of less than three years' service. Their minimum pay will be Rs. 20 per mensem, but they will obtain regular promotion as if they had remained in the middle school. The two permanent assistants will be paid at the rate usually given to junior assistant masters in middle schools.

These terms are not sufficient to attract to the training schools the best teachers in middle schools. The success of a system depends ultimately on the agency responsible for carrying it out—a truism not infrequently ignored in educational administration. Thus the most important question in regard to training schools is how to secure for the staff men of energy and capacity. Special allowances will probably be necessary in order to obtain men of the right stamp.

The certificate awarded to students who have been through a Examination training school is called the *Primary Teacher's Certificate*. The examination is in two parts, theory and practice, as follows:—

37	0.11	Time in	Marks.		
No.	Subjects.	hours.	Maximum.	Mnimum.	
1	First Language.				
	(i) Literature and grammar	21/2	70	***	
	(ii) Unseen and composition	1 ½	50	•••	
	TOTAL .	•••	120	40	
2	Second Language,				
	(i) Literature and gran mar	$2\frac{1}{2}$	50	,44	
	(ii) Dictation and penmanship .	1	30	***	
=	TOTAL .	•••	60	27	
3	Arithmetic	21	Б0	17	
4	Geography	21/2	50	17	
5	Methods of teaching and school management.	3	100	33	

(i) Theory.

Candidates are required to pass in each branch separately as shown in the statement of minimum marks given above; but a candidate who fails in any branch may be re-examined in that branch at any subsequent examination within three years of leaving the training school. To obtain a 'first class' in theory a candidate must get 70 per cent. of the possible aggregate, for a 'second class' 50 per cent., and for a 'third class' 33 per cent.

Formerly the question papers were set and the answer books marked by the deputy inspectors for all candidates in their respective districts, but this was found to be unsatisfactory, as there was no uniformity either in the type of questions set or in the standard of marking. Now there are uniform question papers, set for the whole province by examiners appointed by the Director of Public Instruction. The examination is held on the same dates at suitable centres, one for each district. The answer books are sent for correction to the headmaster of the normal school served by the district and are distributed by him for marking amongst his assistants, who are paid a small fee for the work. Thus the question papers are the same for the whole province and the standard of marking the same in each division; this is sufficient uniformity for all practical purposes. The total cost for the examination of answer books amounts to about Rs. 1,300 for the whole province.

Practice.

The practical part of the examination is conducted at the training school by a board consisting of the deputy inspector, a sub-deputy inspector, and the headmaster of a middle school. It consists of three parts (1) class teaching, (2) drawing, and (3) physical exercises, and is conducted on the same principles as the practical examination at normal schools.

'he certi-

The primary teacher's certificate shows what 'class' the holder obtained in theory, class-teaching, drawing, and physical exercises respectively. A candidate who passes in theory and class-teaching but fails in drawing or physical exercises is granted a certificate, and may appear for re-examination in these subjects at any examination held within three years of his leaving the training school; if he passes in drawing or physical exercises at this subsequent examination his success is recorded on the certificate by the deputy inspector.

Assuming that the stipend of students is raised from Rs. 6 per Cost. mensem to Rs. 8 per mensem we may estimate the total cost of a training school as follows:—

			Ks.	
Headmaster at Rs. 25 per mensem	•		300	per <mark>a</mark> nnum.
First assistant at Rs. 14 per mensem		•	168	,,,
Second assistant at Rs. 12 per mensem			144	1)
Stipends for eight pupil-teachers at Rs.	8 per			
mensem each			768	23
Repair of furniture and purchase of ap-	pliance	28	10	**
Repairs of buildings			30	,,
House rent for 'hostel' (including mi	iscella	•		
neous expenditure)			24	,,
Contingencies (ink, paper, chalk, etc.)	•	•	15	"
Library grant		•	5	3 7
m	_			
Tota	L	•	1,464	11

To arrive at the nett cost of training a student we must Cost of pro remember that the training school serves a particular area as a full ducing a primary school. The minimum annual cost of the latter may be teacher. estimated as follows:—

D.

							Kā.	
Headmaster at Rs. 10	6 pe	er men	sem		Α,		192 pc	r annum.
First assistant at Rs.	14	per me	ensem	•			168	,,
Second assistant at F	ξs. 1	2 per	mensem				144	1>
Third assistant at Rs	, 12	per n	nensem	ŧ			144	52
Contingencies and re-	pair	of fur	niture				15	,,
Repairs of building	•	•	•	•		•	15	>>
		`	Тота	A L		•	6 7 8	23 6

Thus the nett cost of a training school for eight pupil-teachers is Rs. 786 per annum or approximately Rs. 98 per student in training.

Teachers for English Schools for boys.

I .- Demand for trained teachers.

lumber of lass teachers mployed in inglish chools for ndian boys.

The total number of teachers employed in English schools on the 31st March 1917 was 3,084, of whom 628 were trained and 2,456 untrained. About two-thirds of the total were ordinary class teachers and teachers of mathematics and science to whom the regular system of training applies, the remainder being teachers of classical languages, physical exercises and special subjects such as drawing, commerce and manual training. There were thus about 2,000 class teachers, of whom about 600 are trained.

Vastage.

The wastage (due to retirement, death, the counter attractions of the legal profession, etc.) on this number may be reckoned at 6 per cent. or 120 per annum.

equirements or expansion.

It is not easy to estimate the probable rate of expansion of English schools. Government has not assumed direct responsibility for the provision of secondary schools beyond the upkeep of 'model schools', one in each district. These schools have already been established in most districts. They will doubtless grow in size and some new ones will be added, but the rate of increase in their eurolment is a diminishing figure. It will probably be safe to allow for an increase of 3,000 pupils in government schools during the next five years, i.e., for an increase of 600 per annum. It is impossible to calculate with any exactness the increase of enrolment in aided schools; a reasonable estimate would be an increase of 50 per cent. greater than in government schools, i.e., about 900 pupils per annum. Thus the total rate of increase in the number of pupils in English schools during the next five years may be estimated at 1,500 per annum. The average number of pupils per teacher is 30. Hence for expansion we require 50 new teachers each year.

Thus the total annual demand for teachers in English schools is at present 120 (for wastage) plus 50 (for expansion), i.e., 170.

emand after e years.

At the end of five years the total number of class teachers employed in English schools will probably be about 2,250. The wastage on this number at 6 per cent. is 135 per annum.

To allow for expansion at least 50 additional teachers per annum vill be required. Thus at the end of five years the demand by hese schools for trained teachers will be about 185 per annum.

II.—Supply of trained teachers.

There are at present in these provinces two colleges for the Present raining of teachers for English schools, the Allahabad Training output of trained College and the Lucknow Training College. Both are Govern-teachers. nent institutions; the former is a university college confined to graduates; the latter is a departmental college for the training of undergraduates. The length of the course at the Allahabad ollege is one academic year. The enrolment when the college started ight years ago was only 26, but it is now 60; the annual output (excluding permanent failures, men required for the inspectorate, and men who take service outside the province) is about 50. The Lucknow college has a two years' course for students who have passed the school leaving certificate examination and t one year's course for those who have passed the intermediate examination of the university. The annual available output of certificated teachers from the Lucknow college is about 30. Thus the total output of trained secondary teachers is at present 80, i.e., about 50 per cent. of the number required.

It is proposed to build at Agra an additional training college reposed for undergraduates. The plans have already been prepared and additional colleges. the funds provided for this college; it will probably be opened next year. The annual available output will be the same as that of the Lucknow college, viz., 30. To keep pace with the demand for trained teachers we shall have to provide, in addition to the Agra College, two new colleges, one for graduates and one for undergraduates. Our total output from five collegestwo for graduates and three for undergraduates-would be $50 \times 2 + 30 \times 3$, i.e., 190. We saw that the demand for trained teachers at the end of five years would be about 185 per annum. The five colleges would meet this demand and would in addition provide for the requirements of the inspectorate and foreign service, but there would be no surplus for the replacement of untrained by trained teachers.

Undergraduates with the school leaving certificate qualifica- Inducemen tion are forthcoming in sufficient numbers, but it is by no to train.

means certain that we should be able to fill two colleges with graduates. The stipend given to graduates in training-Rs. 20is sufficient to maintain them; but, as many are married men with families, the provision of a bare sustenance allowance while under training is no great inducement. The only certain means of attracting suitable men to the training colleges is to make the teaching profession more attractive. What His Excellency the Viceroy said * about Indian teachers in general is true of the great majority of graduate teachers in the aided schools of these provinces. They regard the work of teaching "as a form of employment which will keep the wolf from the door until . . . some other permanent occupation can be secured." "This" said His Excellency, "is not as it should be. The profession of teaching is a great and honourable profession, and it should engage the whole attention of those who follow it. But this is not likely to be the case as long as teachers are paid an inadequate wage. If we are to divert students to this work we must increase the pay and opportunities of our teachers and magnify the status of the teaching profession."

III .- Types of Training Colleges in the United Provinces.

The old training college at Allahapad

Prior to 1909 there was only one training college in the United Provinces. It trained three grades of teachers, matriculates, 'intermediates', and graduates. The matriculates had a two years' and the others a one year's course. There were two classes, a 'junior class' comprising only matriculates in their first year and a 'senior class' comprising matriculates who had passed through the junior class, 'intermediates', and graduates. There was a marked gap in attainments between the graduates and undergraduates, especially in English, and it was therefore found impossible to frame a course which was stimulating for the former and at the same time not beyond the capabilities of the latter. Moreover the work for which the graduate had to be trained was not precisely the work which would be required of the undergraduate. The graduates usually teach in the high section of the school and the undergraduates in the middle or primary section; the work of the former is essentially 'secondary', of the latter 'elementary'.

^{*} Convocation address to Calcutta University.

While much that is fundamental to all education may be Needs of taught simultaneously to both classes of students there are good elementary and secondar reasons for differentiation between the courses for elementary teachers. and secondary teachers. Thus Mr. H. Sharp says *: "The elementary teacher has a limited ground-work of knowledge; he has not been fitted by a university career for the appreciation and application of general principles . . . The secondary teacher possesses a greater breadth of knowledge and (presumably) a higher power of applying abstract truths . . . The elementary teacher will be called upon to manage children whose age and forms of thought are far removed from his own . . . The secondary teacher is not confronted with this difficulty; those with whom he will come in contact are of an age and a mode of thought more closely akin to his own. The child in the formative stage requires concrete facts, direct instruction, plain and imperative discipline. The youth in the stage of orientation requires power of arranging facts, instruction by suggestion, a reasonable discipline based on compromise. The course of training suitable for an elementary teacher should therefore aim, not at great width of knowledge but at a large amount of practice, at general methods of teaching all elementary subjects, at a uniform concrete and empirical methodology in each particular subject . . . at the psychology and physiology of childhood. Against this, the course laid down for secondary teachers should comprise wider general knowledge with some highly specialised knowledge; . . . theoretical and scientific methodology not categorically presented, but of sufficient variety to permit of choice and adaptation; studies calculated to enable him to produce enthusiasm and habits of orderly thinking in his pupils; the psychology and physiology of adolescence."

Experience showed that it was necessary to recognise the line Break up of of demarcation between the training of graduates and undergradu- into two, one ates, and in 1909 it was decided to break up the college at for graduater and the other Allahabad and to establish two new training colleges, one for for undergraduates only at Allahabad and the other for undergraduates at graduates. Lucknow.

^{*} Occasional Reports No. 5: The Training of Elementary and Secondary Teachors, p. 93.

The Government Training College, Allahabad.

Connexion with the University.

The Allahabad Training College is affiliated to the Allahabad University for the degree of licentiate in teaching. There are undoubtedly drawbacks * in this relationship; the courses are determined and the examination conducted by a body which knows little about the internal working of the college and examinable knowledge is likely to count for more than the capacity to manage and teach a class. But in practice we have not felt these disadvantages, as the university has given us almost as much freedom as we should enjoy were we, like the secondary training colleges of England, a part of a 'teaching university'. Moreover the college staff is represented on the board of studies, on the board of moderators in teaching, on the faculty of Arts and on the Senate, and the principal has a considerable voice in the award of the degree. The only serious objection to the university connexion is that the written part of the examination is conducted by examiners who have little or no knowledge of the methods of teaching adopted by the staff; in some years this has led to results inconsistent with the college records. The value of the university connexion is that degree is regarded by entrants to the profession as a distinction more worth striving after than a departmental certificate. It therefore attracts graduates to the college; when it was instituted the number of graduate candidates for training at once rose from six to about thirty.

Admission.

The college admits graduates of the University of Allahabad, and graduates of other universities who have been resident for at least three years in the United Provinces. It is open to both men and women. Candidates who are over 30 years of age are not usually accepted. The number of men students is restricted to 60; this number has been fixed as the maximum for whom satisfactory arrangements for practical teaching can be made. The number of women candidates is small—never more than six; separate arrangements are made for their practical work. Applicants from native states are admitted when there is room.

^{*}Vide Occasional Reports No. 5: A Report on the Bombay Training College for Secondary Teachers; by J. Nelson Fraser, p. 140.

There are 54 stipends of the value of Rs. 20 per mensem. A stipends. few untrained graduates who are serving in Government schools are deputed on half pay. As a rule candidates are not willing to come without a stipend. This year there were in all 66 suitable men applicants from the United Provinces. Of these 4 were deputed teachers; of the remaining 62 none was willing to come without a stipend. As there were only 51 stipends available for men (three of the women candidates were stipendiaries) we enrolled only 55 men (51 stipendiaries and 4 deputed teachers) although there was room for 60. The vacant places were offered to applicants from native states. It is proposed next year to increase the number of stipends to 60. Three or four will be given to women and thus there will be a few vacancies for deputed teachers or applicants from native states.

Candidates present themselves before the Inspector of the Method of division in which they reside. They fill up a form giving the candidates. following particulars: age, caste, length of residence in the United Provinces; nature of degree; qualifications in games; how employed since graduation. The Inspector adds his remarks and forwards the form, together with copies of the candidate's testimonials, to the Principal, who then makes his selection. Candidates who have been teaching for one or two years are preferred to non-teachers, but those with a good college record are admitted even if they have had no experience of teaching, as otherwise they might be lost to the teaching profession. Of the men students admitted this year only nine are without previous experience in teaching; women candidates are usually non-teachers.

A question even more difficult than how to secure sufficient Quality of graduates for training is how to secure the right kind of graduate. admitted. At present we are not getting satisfactory material. About 80 per cent. of the applicants for admission are men with a third class degree, and in the nine years of our existence we have had only four M.A.'s. and one M. Sc. We occasionally get good students who have taken to teaching out of love for the work, but, as already pointed out, graduates of ability are reluctant to prepare themselves seriously for a profession which offers few attractions to ambitious men. At present all trained graduates in government service start on the same pay, Rs. 70 per mensem. One way of attracting better men to the profession would be to have a

scale of initial pay graduated according to the academic qualifications of candidates. It is difficult now to find Indian teachers fully qualified for the more important headmasterships and for the higher appointments in the inspectorate which are open to them. This difficulty will increase as the number of these appointments grows unless steps be taken to attract into the schools—the only training ground for headmasters and the best training ground for inspectors—men of higher ability than that connoted by a third class pass B.A. degree.

Agreement.

Students are not required to bind themselves to serve as teachers. A bond to this effect is difficult to enforce, and as a matter of fact only five of the students who graduated from the college in the period 1910—1916 have subsequently taken to employment other than teaching.

The only agreement we make students sign is to the effect that (1) if they leave the college for any reason other than ill-health they will refund the amount which they have received as stipend, and (2) they will not study for or enter their names for any examination other than the L.T. examination while they are at the college.

The course in theory.'
(i) Compulsory.

There are four compulsory subjects, as follows:-

- 1. Principles of Teaching.—(a) A general treatment of psychology such as is found in an elementary text-book of the nature of James' 'Talks to Teachers.'
- (b) Further treatment of the following points, dealing especially with their reference to the actual work of teaching:—
 - The presentative and representative elements of consciousness; association and apperception; interest, attention and memory; the main mental differences between childhood and adolescence.
- 2. History of Education.—Outline study of the educational theories of the following.—Comenius, Locke, Rousseau, Pestalozzi, Froebel, and Herbart.
- 3. Methods of Teaching.—Methods and apparatus suitable for the teaching of the various subjects of the curriculum of secondary schools in India.

- (4) School. Management and Hygiene.—(a) Home-work; note-books; correlation of subjects; discipline and class management; class records; time-tables.
- (b) Common infectious diseases, their signs and prevention; simple casualties; eyesight and hearing; fatigue; natural ventilation; arrangement of class rooms; school furniture; physical exercises.

The value of the history of education and psychology in a training college curriculum is sometimes questioned, and it is therefore perhaps desirable to state what we regard as the main aims of these courses.

The history of education is open to the objection that it lends value of the itself to cram; it is an examinable subject. But our experience course in the history of is that a study of the lives of the great educational reformers has education. a stimulating effect on students. The history of education is more than a record of the gradual development of educational ideals; it is a record also of personal service in the cause of education. A study of the lives of the great reformers gives a new point of view to men who frankly say on their admission to the college that it is their 'hard fate' to enter the teaching profession.

In the course on the principles of teaching we do not attempt Value of the a deep study of psychology. Every problem of psychology is not psychology. of equal value to the teacher; but he must understand "how learning is possible at all, the nature of the process, and so . . . what hindrances there are to learning, and how they may be over-come, . . . how the mind strengthens and develops from infancy upward, how children naturally think and feel and act at successive stages of school life, what occupations and forms of instructions are suited to their growing powers at these various stages.* ' These are all questions a study of which throws light on the practical problem of how to manage and teach a class.

The course of lectures on hygiene is delivered by one of the Supplement-college staff. It is supplemented by 20 lectures, delivered by a ary course in hygiene. medical officer, on the following topics:-

Lectures on first aid. Application of the lectures:-Bandages and their application to sprains, wounds,

^{*} Occasional Report No. 5 :- Training Institutions for Secondary Teachers in the United Kingdom, by H. R. James,

THE TRAINING OF TEACHERS

boils, etc.; splints, and their application to fractures; arrest of bleeding; artificial respiration in cases of drowning, etc.; stretcher drill with reference to accidents and severe illness; sight testing in order to determine whether a boy needs the attention of an occulist; nursing chart; clinical thermometer and its variations, temperature chart; periods during which children should be excluded from school in the case of measles, chicken pox, small pox, diptheria, whooping cough, mumps, enteric fever; the furniture, bed and bedding of a sick room; disinfection of a sick room; urinals and latrines, spittoons, how to keep and to dispose of sputum; expectoration and vomited matter.

(ii) Optional 'special sub-jects.'

In addition to the four compulsory subjects, students are allowed to specialise in the methods of teaching one of the following subjects: history, geography, mathematics, physics and chemistry, nature study, manual training. A notable omission from this list is English. The reason is that owing to the important place English occupies in the school curriculum special attention is given to this subject in the compulsory course on the methods of teaching, and therefore an additional special course is not considered necessary. The science course is restricted to science graduates, the history course to students who have taken history as a subject for the B.A. degree and the mathematics course to those who have graduated in mathematics. The general principle which we try to enforce is that the special qualification should connote a knowledge of the subject matter as well as a knowledge of the methods of teaching it. Students who are not qualified to take up science, history, or mathematics may elect to take nature study, or geography, or manual training, in which at present we cannot lay down any preliminary qualifications. About 90 per cent. of the students choose some special subject. No student is allowed to take more than one subject, but the uviversity has recently passed a regulation to the effect that licentiates in teaching may return to the college for 50 working days to study an additional special subjects; if successful in the examination in this subject they have their diplomas endorsed accordingly.

The only special course to which students other than candidates for the L. T. degree are admitted is the course in manual training. We admit to this course men who have passed the intermediate examination of the university, and, for special reasons, men with lower qualifications. They receive stipends of the value of Rs. 15 per mensem and, if they satisfactorily complete the course, are awarded a departmental certificate which qualifies them to teach manual training in a high school. Hitherto this scheme has failed to attract many students, probably because as yet there is no great demand for teachers of manual training. During the past four years seven certificates have been awarded-all to men admitted without the Intermediate qualification.

There are two main reasons for including special subjects in Reasons for the inclusion the curriculum:

of special subjects in

- (i) There is a movement in the schools in favour of speci-the curriculum. alisation. Thus there are specialists in history, geography, and science. These specialists are responsible for all the teaching of a particular subject in the four . highest classes of the school; in some cases they also supervise the teaching of the subject in the lower classes. Notwithstanding the difficulties of organization and dissipation of personal influence that result from working a school by specialists, there is much to be said in favour of the system; the specialist gets to know his subject thoroughly, he often becomes an enthusiast for it and endeavours to keep himself acquainted with new devices or methods for teaching it, and he takes a pride in furnishing his class room with illustrations and apparatus. In order to give a stimulus to this movement we wish to encourage students while under training to specialise in the subject of the school curriculum of which they have a special knowledge or for which they have a marked liking.
- (ii) There are some subjects of the school curriculum (e.g., geography, nature study, manual training) for which even graduates have not the teacher's

indispensable equipment—a knowledge of the subject matter. There are other subjects which are studied at the university by methods which are not applicable to school boys. To instruct students in the methods suitable for schools it is not enough to give them general directions; it is desirable that they should revise the subject matter with reference to its presentation to a class. Thus the mathematics teacher should revise the elementary portions of his subject with reference to the experimental treatment which is suitable for junior classes; the science teacher with reference to the use of cheap home-made apparatus. It is impossible in a period of ten months to add to our course of professional training an academic study of all the subjects of the school curriculum. But we can include subject matter in the special courses, and thus ensure thorough revision of at least one subject of the curriculum.

Syllabuses in special subjects. The syllabuses in special subjects are given below. The courses in history, geography, mathematics, and physics and chemistry are only briefly summarised, but the syllabuses in nature study and manual training are given in detail as these are new subjects in the curriculum of English schools:—

History.

- (i) Aims and methods.—Chapters on the teaching of history from the manuals on method by Barnett, Spencer, Adamson, and Welton, and selected portions of "Studies in the Teaching of History" by Keatinge and "Teaching of History and Civics" by Bourne.
- (ii) Practical work.—Time-charts; maps.
- (iii) Subject matter.—" Mediæval India" by Lane-Poole;
 "Gazetteer of India", Volume II, Chapters 7-17;
 "Rise of British Dominion in India" by Lyall;
 "India" (especially regarding revenue) by Strachey;
 and one of the "Rulers of India" series.

Geography.

(i) Aims and methods.—"Suggestions for the Teaching of Geography" (Board of Education); "Memorandum

on the Teaching of Geography" (Scotch Education Department); "Report of a Conference on the Teaching of Geography in London Elementary Schools"; selected chapters from "The Teaching of Geography" by Archer, Lewis, and Chapman, and from "The Teaching of Geography" by Wallis.

- (ii) Practical work.—Making of illustrations, maps, diagrams, and models.
- (iii) Subject matter.—The detailed geography, physical and general, of some special region selected on account of its suitability as an illustration of the regional treatment of geography, e.g., South America.

Mathematics.

- (i) Aims and methods.—" The Teaching of Mathematics in Secondary Schools" by Schultze.
- (ii) Practical work.—Practical methods of solving problems in elementary mathematics; use of graphs; graphical statics; practical mensuration and determination of density; problems on the applications of trigonometry to practical surveying.
- (iii) Subject matter.—Revision of the essentials of the school syllabus in mathematics with special reference to teaching it.

Physics and Chemistry.

- (i) Aims and methods.—"The Teaching of Physics and Chemistry" by Smith and Hall.
- (ii) Practical work.—The chief experiments of the school course revised with reference to the points to which special attention should be directed in teaching pupils and to the use of simple home-made apparatus; glass working; woodwork (to enable the science master to construct or repair apparatus).
- (iii) Subject matter.—Revision of the essentials of the school syllabus with special reference to the conduct of lecture-table experiments.

Nature Study.

- (i) Lectures.—On the aims and methods of nature study, and the principles underlying the teaching of the subject. The following topics have special treatment:—relation to observation lessons and to science; school gardens; excursions; collections; calendars; use of books; schemes of work; correlation with other school subjects, especially English, geography, manual training and drawing.
- (ii) Aims and methods.—(a) "Suggestions for the Teaching of Nature Study" (Board of Education); (b) "Memorandum on the Teaching of Nature Study" (Scotch Education Department); (c) "Aims and Methods of Nature Study" (Rennie); (d) Selected chapters from:—"Nature Study and the Child" (Scott), "Practice of Instruction" (Adamson), "Principles of Teaching" (Welton); (e) Articles in journals, as directed.
- (iii) Teaching.—(a) Practical teaching by the students; (b)
 Demonstration lessons; (c) Criticism lessons.
- (iv) Practical work.—Students will pursue a course of practical nature study. The objects of this course are:—
 (a) To give the students some knowledge of subject matter; (b) To illustrate the methods of pursuing the study of the subject.

The course is as follows:--

I. Some plant studies: How a plant grows, performs its cycle and dies. What this cycle is. Growth of some large seeded plant, e.g., kidney bean, for continuous observation and for giving knowledge of parts. Study of whole growth, observation of the conditions under which plants thrive; adverse conditions. Experimental growth under varying conditions of (a) soil, (b) water (c) light, and (d) air. The great function of plant life—propagation. The flower and its relation to the cycle—flower, fruit, seed. Fertilization and its meaning. Flowers and attractiveness. Observation of flowers to investigate relationship of insect life to

flowers. Study of several trees throughout the session and a general knowledge and description of several common flowering plants. Some leaf studies to show modifications to withstand climatic conditions. Plants and the way they protect themselves.

- II. Life cycle of mosquito, butterfly, and frog.
- III. Recognition of a number of common birds, (a) by form and colour, (b) by their notes, (c) by their habitat. Relation to life and conditions, as illustrated by colour, beak, shape, etc.

Manual Training.

- (i) Lectures on the following topics:—What is educational handwork? Its place in the curriculum. Its aims and scope. Its values. Different kinds of handwork. Correlation with other school subjects. Its place in the school time-table. Method in paper and cardboard work. Method in drawing. Method in woodwork. The teacher of educational handwork. Hygienic conditions in the workshop. Position of the body. Class management. The workshop; its plan, equipment, arrangement of benches, furniture. Timber; its structure, felling, seasoning, shrinking and warping. Changes and decay of timber and means of prevention.
- folding, cutting-out and modelling. (b) Card-board work: exercises involving scoring, use of binding strips, cutting out and mounting. (c) Woodwork exercises involving the use of the following tools:—jack plane, try-square, marking knife, marking awl, tenon saw, smoothing plane, bevel square, screw driver, firmer chisel, mallet, bradawl, nail punch, gauge, countersink bit, auger gimlet, frame saw, brace, centre bit, auger bit, turnscrew bit, file, hammer. The following joints:—halving, housing, mortising, dovetailing, bridle, tongue and butt. Preparation of models by students from their own design. (d) Care of tools:—the maintenance in good working order of jack plane, smoothing plane, tenon saw, bevel square,

screw driver, firmer chisel, hammer, mallet, bradawl, gimlet, frame saw, spokeshave, brace, bits, files.

The staff.

The staff of the college is as follows:-

Designation.	Pay.	Qualifications.			
Principal	Rs. 503-50-1,000 200-10-250	Graduates in Honours of British Universities. Train- ed for and with experience of teaching in secondary schools in Great Britain.			
Demonstrator in science and mathematics, Demonstrator in manual training. Assistant demonstrator in manual training.	100-5-150 75-5-100 40-5-60	Graduates of Allahabad University. Trained at the Training College, Allahabad. Trained at the Training College, Lucknow.			

Practising schools.

There are four practising schools. One is the Government High School, which is situated in the college compound, and another is on an adjoining site, which was granted to it free of cost on condition that the school admitted students for 'practice': the remaining two schools are within ten minutes walk. Each of the four schools has about 16 classes and 500 pupils. We find that four practising schools for sixty students is about the right proportion, so that on the one hand students may have adequate practice and on the other hand no particular school may suffer unduly from practice by students in training. This view is confirmed by the opinion of Professor Adamson, professor of education in King's College, London, who says * that "in the case of primary teachers one hundred students should have access to seven or eight schools of from 250 to 400 pupils each," and advocates a greater number of secondary schools per hundred students owing to "a more complicated curriculum and the needs of those who intend to become specialists." Professor Adamson insists on the need for a number of practising schools, as otherwise "we shall suffer from the creation of big meffective institutions placed where they shall be crippled from the outset." He pertinently adds, "A training

^{*} The School World, May 1904.

TRAINING COLLEGE, ALLAHABAD.

Time-table of Forenoon Session.

Approximate dates, to—— 25th August.		h August. 30th September.		30th September.	30th September.	30th September.	30th September.	30th September.	30th September.	30th September.	30th September.	10th Octo- ber.	20th Octo- ber.	200	th Noveml	er	221	d Decemb	er.	2nd Janu- ary.		31st	January.		31st March.
10-45	-	A (1) in I P., V. P., Pr., L.	C (1) in I P., V. P., Pr., L.					(2, in I Pr., L.	Criticism Lessons—P.	B (3) in I V. P., Pr., L.		Criticism Lessons—P.		HistoryV. P. GeographyPr. assisted by L. Nature study Pr.			The time-table of the last two months of the session varies from year to year according to the progress made by the students.								
e and Mathemat	Manual Training.—M 1 and M 2.	B (1) in I P., V. P., L., S. Nature st. History Nature study and		Dasehra vacations.) Demonstration Lessons.	5 of B (2) in II Pr. 5 of C (2) in II P.	5 of B(!) in HI V. P. 5 of C(2) in HII V. P.	5 of B (2) in IV L. 5 of C (2) in IV L. study and	5 of A (3) in II Pr. 5 of D (2) in II P.	5 of A (3) in III V. P. 5 of D (2) in III VP.	5 of A (3) in IV L. 5 of D (2) in IV L.	Christmas vacations.	5 of C (3) in II V. P. 5 of D (3) in II V. P.	5 of C (3) in Ht Pr. 5 of D (3) in HH Pr.	5 of C (3) in IV L. 5 of D (3) in IV L.	Criticism LessonsP.	These months are devoted mainly to special subject, to additional criticism and demonstration lessons, and to revision.								

⁽i) The numbers I, II, III and IV represent the four practising schools.

⁽ii) The letters A, B, C and D represent the four groups of students engaged in practical teaching, Each group consists of 15 students. The figures in brackets show whether a particular group is in its first, second or third month of teaching.

⁽iii) The numbers of the staff engaged in supervising practical teaching or in giving instruction in special subjects are represented as follows: -P = Principal, V. P. = Vice-Principal, Pr. = Professor, L. Lecturer. S. = Demonstrator in science and mathematics, M 1. - Demonstrator in manual training, M 2 = Assistant Demonstrator in manual training.

(iv) During the first month students in groups A and B and during the second month students in groups C and D are instructed one period each day in the use of the blackboard by the Demonstrator in

Manual Training.

college which contained so many students that it could not find enough pupils for practice would be as useful for its special purpose as a medical school in the Hebrides."

The Government High School is for administrative purposes Demonstraunder the control of the principal of the college. Besides being tion school. one of the practising schools it serves the purpose of a demonstration school. The college staff, with the co-operation of the headmaster, carry out experiments with the aim of demonstrating to students the possibilities of methods of teaching advocated in college lectures. Thus we have introduced the direct method of teaching English and practical work in geography, nature-study, and science; we have also added manual training to the school curriculum as a compulsory subject in all classes up to class VIII. The headmaster delivers to the students a course of lectures in which he draws their attention to the means which he adopts to improve the organisation, discipline and corporate life of the school.

The college hours are from 10 A.M. to 3-15 P.M. The forenoon Organisation session is divided into three periods, 10-10-45, 10-45-11-30, 11-30 -12-15; then comes an interval of three quarters of an hour; the after-noon session consists of three periods, 1-1-45, 1-45-2-30, 2-30-3-15. The forenoon session is devoted to practical teaching (including demonstration and criticism lessons) and special subjects; the afternoon session to lectures on the compulsory subjects of the The time-table on page 78 A shows how the forenoon work is organized. The students are divided into four groups of 15 each. Each group teaches for one period per day for 25 working days, i.e., each student has practice in teaching amounting to 75 lesson periods of three quarters of an hour each, or about 50 hours, in the session, in addition to attendance at demonstration and criticism lessons. The Government High School being close at hand is used exclusively in the rains; thereafter the practical work is distributed over the four practising schools.

When free from practical teaching the students devote all their time in the forenoon to their special subjects. For part of the session they work at these independently without assistance from the staff, but in every special subject there is a certain Admission.

The college admits for a two years' course candidates who have passed the school leaving certificate examination and for a one year's course candidates who have passed the intermediate examination of the university and candidates who have passed the school leaving certificate examination and have served with credit as teachers for three years.

Classes.

There are two classes, a 'junior class' consisting of candidates admitted to the two years' course and a 'senior class' consisting of students who have been a year at the college and of candidates admitted to a single year's course. The average strength of the junior class is 15 and of the senior class 35. The principal is of opinion that a one year's course is too short, and he thinks that candidates who have passed the school leaving certificate examination and those who have passed the intermediate examination could profitably be trained together in a two years' course.

Number of applicants for admission.

The number of applicants for admission considerably exceeds the number of vacancies. At the opening of session 1916-17 there were 44 applicants for 20 vacancies in the senior class and 120 applicants for 15 vacancies in the junior class.

suipends.

There are 40 stipends of the value of Rs. 15 per mensem. About 10 teachers are deputed, usually on half pay, from schools in the province or from native states.

Agreement.

The only condition attached to the stipend is that students who leave the college before the end of the session for any reason other than ill-health must refund the total sum which they have received as stipend.

The course in theory.

The course of study for the junior class consists of:—

- (a) Subject matter: English, the vernaculars (Urdu and Hindi), mathematics, and science or history and geography.
 - (b) Black-board writing and drawing.
 - (c) School management, school hygiene, and methods of teaching.
 - (d) Manual training.

(11) Senior class.

(i) Junior

class.

The work of the senior class consists of:

- (a) Subject matter.
- (b) Black-board writing and drawing.

As for the junior class; students in their second year revise the first year's work.

- (c) School management, school hygiene, and methods of teaching-a more advanced course than in the junior class.
- (d) An elementary course in psychology.

There are three practising schools, all within easy walking Practising schools. distance of the college. One, the Jubilee High School, is under the administrative control of the principal and is in the same compound as the college. Like the Government High School at Allahabad it serves the purposes of a demonstration school.

The 50 students at the college are divided into three batches Organization of approximately 16 each. Each batch teaches for 20 consecutive of practical teaching. working days throughout the whole school day. Thus during their period of teaching one-year students have about three weeks continuous practice and two-year students about six weeks, three in each year. Besides teaching classes the students assist, during their period of practical teaching, in the supervision of school games and in the management of the Jubilee High School hostel

Under this arrangement, during the nine weeks of practical teaching there are always approximately 32 students at the college and 16 students teaching in the practising schools. The college staff are fully occupied with the former, and therefore supervision over the practical teaching is delegated to the class teachers of the practising schools. The principal considers this a weakness of the system, but the only way of securing competent supervision would be to strengthen the staff to make it possible to adopt an organization of the practical work similar to that at the Allahabad college. Other disadvantages of the scheme are that it is necessary to repeat the lectures which students have missed during their three weeks of practice and the practical work is very intensive.

Considerable attention is given to physical exercises. The Physical course is compulsory for all students; it includes foot and forma-training. tion drill, dumb-bell exercises and desikusrat.

The college conducts special courses for teachers of physical Courses for teachers of exercises, classical languages, and manual training. special

The course in physical exercises is for the benefit of drill subjects.

(i) Physical instructors employed in English schools. This course lasts for exercises.

one month and is conducted by the college teacher of physical exercises and is supervised by the principal, who is keenly interested in physical training. Drill instructors employed in government schools are deputed to this course on full pay. The course is open also to aided school teachers, who are charged a fee of Rs. 10.

(ii) Classical languages.

With a view to increasing the usefulness of maulvis and pandits and acquainting them with improved methods of instruction, language teachers employed in government schools are deputed to the college for ten months on about two-thirds of their full pay. Suitable candidates from aided schools also are admitted, but without stipend. The language teachers attend the ordinary lectures on the theory and practice of teaching and receive special training in the methods of teaching languages. Teachers who satisfactorily complete the course are granted departmental certificates as language teachers.

(iii) Manual raining.

The special course in manual training has been instituted with the aim of providing teachers in the subject for English schools. Candidates for admission to the course must have passed the school leaving certificate examination. The course lasts for ten months. The number of students admitted to this special course is restricted to three per annum; they receive stipends of Rs. 15 per mensem.

taff.

The staff of the college is as follows:---

Designation.				Qualifications.	Pay per mensem.		
Principal	•	•	•	Graduate of Calcutta University; Associate of the College of Preceptors; special qualifications in physical exercises and manual training.	Rs. 400—20—700		
Lecturer	•		•	Graduate of Allahabad University;	200		
Lecturer	•	•	٠	Graduate of Allahabad University; trained.	150-5-175		
Demonstrator training.	in	man	ual	Trained at Roorkee College	75—5—9 0		
Assistant Demo		ator	in	Greenwich Autor-Prins	40		
Teacher of exercises.		hysi	cal	Indian Army Havildar	20		

The certificate granted to teachers trained at the college is Examination. called the Departmental Teachers' Certificate. The examination for the certificate consists of two papers (one on elementary psychology, school management and hygiene and the other on methods of teaching) and a test in practice of teaching conducted by a board consisting of the principal and two external examiners. Students are not presented for the examination unless they have passed the college terminal examinations in 'subject matter.' In the decision of doubtful cases considerable weight is attached to the work done by students while under training, as judged by the records kept by the principal. The average percentage of passes is about 92.

Students trained at the college have no difficulty in securing Subsequent appointments. The great majority become assistant masters in career of students. government schools. The minimum commencing salary is Rs. 40 per mensem. It is evident from the number of candidates applying for admission to the college that this pay is high enough to attract to the profession a sufficient number of recruits with the school leaving certificate qualification.

. The college annual budget is as follows:-

Coat.

	Rs.	
Salaries of staff	12,700 per ann	um-
Salary of clerk	5 20 ,,	
,, ,, librarian	360 ,,	
Twenty-eight stipends at Rs. 15 per mensem		
each for 10 months	4 ,200 ,,	
Twelve stipends at Rs. 15 per mensem each		
for 12 months	2 ,160 ,,	
Three stipends for teachers of manual train-		
ing at Rs. 15 per mensem each for 10		
months	,ر 450	
Laboratory assistant at Rs. 12 per mensem .	144,	
Servants (1 at Rs. 8, 1 at Rs. 7, and 5 at		
Rs. 6 per mensem)	540 ,,	
Travelling allowance	100 ,,	
Allowance to medical officer for supplemen-		
tary instruction in hygiene	240	
Purchase of books	200 "	
Apparatus	300 ,,	
Contingencies	2,241 ,,	
-	-, ,,	
Total .	24,155	

The average annual output of the college is 35 class teachers and 5 teachers of special subjects, i.e., a total of 40. Hence the average cost of producing a trained teacher amounts to about Rs. 600.

TEACHERS FOR INDIAN GIRLS' SCHOOLS.

Vernacular Schools for Indian Girls.

I.—De mand for trained teachers.

Number of trained teachers required. The paucity in the supply of trained teachers is one of the chief causes operating against the progress of female education. The number of teachers who could be employed, if they were available, in the expansion of education is, as one of the Inspectresses says, 'unlimited.' It will be time enough to estimate it more definitely when our supply is at least equal to the wastage on the present staff. During the year 1916-17 there were 1,896 teachers employed in vernacular girls' schools; of these only 240 were trained. The annual wastage of women vernacular teachers is higher than that of men; it may be estimated at 10 per cent. Thus the number of trained women teachers required annually on the staff of vernacular schools to replace wastage is at present about 190.

II .- Supply of trained teachers.

Annual output of trained teachers.

There are two grades of classes for training women teachers for vernacular schools, (1) Normal schools and training classes working for the vernacular teachers' certificate, and (2) Training classes working for the primary teachers' certificate. Last year the enrolment was respectively 90 and 60, i.e., a total of 150. The length of both courses is two years; the number of students who last year obtained the certificate was only 35.

As a set-off to these discouraging figures the following remarks by the chief inspectress may be quoted: "The total number of trained teachers has increased by 73 per cent. since 1911-12. This leaves the proportion of trained to untrained still very much too low, but there has been an improvement in the qualifications of the untrained teacher which does not appear in the statistics. In practically all the vernacular schools which I have visited I have found one or more, or sometimes all of the staff, studying privately with a view to being examined in the course of one or other of the sections; sometimes unfortunately it is only that of the lower primary, but in a certain number of cases mistresses

have appeared for the vernacular final examination, a standard at which they rarely aimed a few years ago The motive for this further study is sometimes ambition, sometimes pressure from the Inspectress and more often the hope of the better pay which is now recognized as the probable reward of better qualifications."

The chief methods employed to encourage women to enter the Methods adopteaching profession and to improve their qualifications are the ted to attract women to the grant of scholarships to prospective teachers, the provision of profession. scholarships for students in training classes, and the improvement of salaries.

The scholarships for prospective teachers are awarded to girls who declare their intention of becoming teachers, and are tenable for a period of two rears in the several sections of a school approved for the purpose.

The number and value of these scholarships are as follows:—

```
Two at Rs. 10 p. m. each.
High section
Upper middle section
                                             Two at Rs. 7
Lower
                                             Eight at Rs. 5
Upper primary "
                                             Nine at Rs. 4
Lower
                                             Five at Rs. 3
```

The scholarships are awarded by the chief inspectress on the recommendation of the circle inspectresses.

Scholarships are awarded also to women who undertake to study privately with a view to teaching. These were at first intended for the wives and relatives of men teachers, but they are now open to any woman who agrees to try to qualify for the teaching profession. Many of the holders are already teachers, who need help in order to pay their pandits' fees. The rules governing these scholarships are as follows:-

- (a) A stipend of Rs. 3 per mensem, tenable for two years will be allowed to any woman who, having passed an examination by the standard of class II, undertakes to study privately for the vernacular primary examination.
- Similarly a stipend of Rs. 4 per mensem, tenable for two years will be allowed to one who, having passed the vernacular primary examination, continues her studies with a view to passing the vernacular final examination.

- (b) The following rewards will be given:—
 - (i) A reward of Rs. 50 for passing the vernacular primary examination.
 - (ii) A reward of Rs. 100 for passing the vernacular final examination.
- (iii) A reward of Rs. 150 for passing by the standard of the High School Scholarship Examination.
- (iv) A reward of Rs. 250 for passing the matriculation or school leaving certificate examination.
- (c) No stipend or reward shall be allowed unless the recipient signifies in writing her willingness to serve as a teacher or as a governess and the department is satisfied that there is a real prospect of her being able to engage in teaching.
- (d) The continuance of the stipend shall depend on the favourable report of the Inspectress regarding the recipient's progress in her studies. For this purpose stipend holders may, if necessary, be required by the Inspectress to present themselves at a convenient place in the district. In such cases single third class railway fare shall be allowed for the stipend holder and the guardian accompanying her, and for road journeys of more than five miles a mileage allowance at the rate of one anna per mile.
- (e) Travelling allowance at the above rates shall also be allowed when the stipend holder has to travel in order to appear at a standard examination.
- (f) Arrangements shall be made for the strict observance of purdah during the examination.

Of all means for inducing suitable women to take up teaching the improvement of salaries is regarded by the chief inspectress as the most likely to be successful, but she says, "In many of the districts the boards find their hands tied by lack of funds." She adds, "In a certain type of aided school there is a growing demand for teachers not only of better qualifications but of greater general refinement, and the possibility of meeting it seems so far to lie rather with the committees of the schools than with Government, as the former can exercise a personal influence which is the best means of inducing women of this type to take up employment."

III .- Normal Schools and Training Classes working for the Vernacular Teachers' Certificate.

The object of these schools and classes is to train teachers Aim. to teach in vernacular schools for girls up to the highest class, which corresponds to class VI of vernacular schools for boys.

There is one Government normal school for women teachers at Number of Lucknow. A second normal school for women will shortly be schools and classes. opened at Bareilly. There are four training classes, all attached to mission girls' schools.

Candidates for admission to the Lucknow Normal School must Qualifications have passed the vernacular final examination; those for admis-for admission. sion to the training classes must have passed either that examination or the girls' lower middle examination (class VI of English schools for girls).

Stipends of the value of Rs. 10 per mensem are given to board-stipends. ers at the Normal School, Lucknow (Rs. 5 to day students), and of Rs. 8 per mensem to students at training classes. The stipend is given on condition that the student agrees to serve as a teacher in the United Provinces for three years after obtaining her certificate, unless exempted by the chief inspectress.

The course of training extends over a period of two sessions. The course The curriculum comprises the following : language, methods of teach- and the certificate examinaing ; school management; history of education; physiology and tion. hygiene; nature study; drawing; sewing and cutting out; cooking (optional); practice of teaching. The examination for the certificate is by means of written papers, set by examiners appointed by the chief inspectress, and a practical test. Weight is given to the records of the candidate's progress while under training. The minimum amount of practical teaching required is 180 hours during the course of training.

The staff of the Government Normal School at Lucknow is Staff of the Lucknow as follows :-Normal Per mensem. School.

								Rs.
Headmis	tress .				•	•	•	150-10-200
Assist ant	Mistress		•		•	•	•	100-10-150
,,	,,				•	٠		75—5—100
1,	او	•	•	•	•	•		50-260
"	,,	•	•	•	•	•		40-2-50
Matron		•	•	٠				80

Attached to the normal school is a model school which also i maintained by Government.

Staff of a training class.

The training class attached to the Victoria Girls' High School has a 'special teacher' on Rs. 50 per mensem; she is supervised by the principal and assisted by members of the school staff. Similar conditions prevail elsewhere.

IV.—Training Classes working for the Primary Teachers' Certificate.

Aim.

These classes are usually attached to Government model schools for girls. Their object is to train teachers for vernacular primary schools. "The work of classes of this type," says the chief inspectress, "is not altogether encouraging; as a rule it is difficult to find recruits for them and when found their capacity is usually so limited that only one here and there develops any real competence as a teacher. At the same time the results that have been achieved are sufficient to justify perseverance with the scheme and the opening of new classes wherever it proves possible."

Number of Classes.

On the 31st March 1917 the number of classes was thirteen. Two of these were attached to mission English schools. This is a new experiment on the part of missions, its object being to find a useful career for girls who cannot make headway with the English course.

Qualifications for admission.

Admission is restricted to women who have passed the primary examination (class IV) and are considered likely to make suitable teachers for girls' schools. Preference is given to young widows and to such teachers as wish to benefit by training. The total number of students in a class must not exceed six.

Stipends.

Students receive stipends of Rs. 6 per mensem; an allowance of Rs. 4 per mensem is made to the student's guardian if the latter is required. The stipend is awarded on the condition that the student will serve as a teacher for three years after she obtains her certificate, if required to do so by the circle inspectress.

The course and the certificate examination.

The course of training extends over two sessions. The curriculum comprises the following subjects:—language; methods of teaching; school management; care of school premises; simple lessons on the nature of children and their discipline; outlines of hygiene; sewing and cutting out; kindergarten work (games and

occupations); cooking (optional); physical exercises (optional); practice of teaching. The examination for the certificate is partly oral and practical and partly written, and is conducted by the circle inspectress. In the examination weight is attached to the records of the candidate's progress as a student.

Each class is under the supervision of an instructress who has Staff been trained at a normal school, or who in the opinion of the circle inspectrees is fit for the post. The minimum pay of a trained instructress is Rs. 30 per mensem. In the event of there being no trained instructress available an untrained teacher, if found fit, may be employed on Rs. 15 to Rs. 30 per mensem according to ability.

English Schools for Indian Girls.

The number of English schools for Indian girls was 36 in Demand for 1916-17; the total staff was 197, of whom 87 were trained. The number of teachers required to replace wastage may be estimated at 12 per annum.

Classes for the training of teachers for English schools are Supply of attached to the Isabella Thoburn College, Lucknow, the Victoria trained teachers. High School, Agra, and the A. P. M. High School, Dehra Dun. The total enrolment (first and second year students) during session 1916-17 was twenty; the number who obtained the certificate in that year was six.

Candidates for admission to these training classes must have Qualification for admission. passed the matriculation examination or its equivalent.

Stipends of the value of Rs. 20 per mensem are awarded to stu-Stipends. dents in training on condition that after obtaining their certificate they will serve as teachers for three years in the United Provinces unless exempted by the chief inspectress.

The length of the course is two years. The curriculum com- The course and the certiprises the following: English; methods of teaching; school ficate management; elementary psychology; history of education; examination. physiology and hygiene; nature study; drawing; brushwork and clay modelling: sewing and cutting out; cooking (optional); practice of teaching. The minimum amount of practical teaching required is 180 hours during the course of training. The examination is conducted by examiners appointed by the chief inspectress. and is by means of written papers and a practical test in teaching,

sewing and cooking. In the examination weight is attached to the records kept by the training class of the candidate's progress as a student.

Staff.

The arrangement at the Victoria High School, Agra, may be taken as typical. The class there is under the charge of a teacher on Rs. 125 per menseur; she is supervised by the principal and assisted by the school staff.

Fraining of kindergarten eachers. At the Isabella Thoburn College, in addition to the class for the training of teachers for the ordinary standards, there is a class for training kindergarten teachers. The length of the course is two years. Last year there were 16 students on the roll. The syllabus is laid down by the college, which grants its own certificate to candidates who satisfactorily complete the course.

Teachers for European Schools.

Vomen.

The number of women teachers employed in European schools is 279, of whom 147 are trained. To meet wastage of existing staff and to provide for expansion about 20 teachers are required annually. The sources of supply are the Training College, Allahabad, for graduates and the training classes at Woodstock College, Mussoorie, and All Saints College, Naini Tal, for undergraduates. The average number of European or Anglo-Indian women graduates trained at Allahabad is four, and the average annual output of trained undergraduates from Mussoorie and Naini Tal is sixteen. Thus the present supply provides for wastage and expansion but does not make provision for improvement of staffing.

The inducements for the training of women are sufficient. The average pay received by trained women graduates is Rs. 120 to Rs. 150 per mensem in the hills and Rs. 150 per mensem in the plains; trained undergraduates receive Rs. 60 to Rs. 70 per mensem in the hills and Rs. 80 to Rs. 100 per mensem in the plains. The stipend given to women in training is Rs. 20 per mensem.

[en.

There is no institution in these provinces for the training of European and Anglo-Indian men teachers; in fact in all India there is only one training class for men of the domiciled community—at Sanawar in the Punjab. The annual output of trained teachers from Sanawar is less than ten. The conference on the education of the domiciled Community held at Simla in 1912

discussed the question and recommended that a training college for men should be established. That there is need for this college is borne out by the figures for the United Provinces; the number of men teachers employed in our European schools is 119, of whom only 54 are trained.

The pay offered to trained men undergraduates is Rs. 100 to Rs. 120 per mensem and to graduates Rs. 200 per mensem and upwards. Owing to the difficulty of obtaining qualified graduates in India, teachers for the higher posts in European boys' schools have to be brought from England or America; of the 20 graduates employed in these schools only 4 are graduates of Indian universities.

The qualification for admission to the training classes for women teachers is the senior local certificate. The length of the course is two years. The course is as follows:—

Theory.

- 1. Psychology.—James: "Talks to Teachers".
- 2. Methods.—The methods of teaching the subjects of the Training class curriculum of European schools.

 (*) Theory.

Text-book: "Suggestions to teachers" (Board of Education).

- 3. School Hygiene and School Management.—(a) Physical health of scholars and the means of maintaining it; signs of distress and fatigue; personal cleanliness; air, light, warmth, and cubic space; the attitudes of children at work; arrangements for games and physical exercises. (b) The work of the head teacher; classification of scholars; distribution of the staff; school records; discipline; time-tables.
- 4. History of Education.—An outline of the lives and theories of the following: Rousseau, Pestalozzi, Fræbel, and Herbart.
- 5. Courses in the subject matter of the school curriculum.—The object of these courses is chiefly to revise and consolidate the knowledge already possessed by the students; they are intended also to provide to the staff an opportunity to set before the students good models of teaching. The classes frame their own courses but submit them for approval to the inspector of European schools. Courses must be provided in, at least, English, history geography, and arithmetic.

The plan of giving the training classes freedom to frame their own courses in subject matter has worked well. The liberty is not abused. On the contrary thorough work is done in 'subject matter.' In English especially freedom for the teacher is appreciated and results in the English classics being regarded by the students as a permanent source of enjoyment.

6) Practice.

Candidates have practice in teaching a class and in black-board work. The number of hours given to practical teaching is 120 in two years.

Examination.

The examination consists of four written papers in 'theory' and a practical test conducted by two examiners. Successful candidates are classed in three divisions separately for theory and practice. Doubtful cases are decided by reference to the training class records of work done by students while under training.

Special subjects.

The training classes may present candidates for special certificates in drawing, singing, physical exercises, or sewing. The courses in special subjects are framed by the training classes, but are subject to the approval of the inspector of European schools. Candidates must satisfy the examiners, by means of written and practical tests and on the record of their work done while under training, that they are qualified to teach the special subjects which they offer. A student is not encouraged to take up a special subject unless she has a natural gift for it.

The training of kindergarten teachers. A conference was held last year to make proposals (which have since been accepted by Government) for the training of kindergarten teachers for European schools. The following were the chief recommendations:—

- (1) The name of the examination should be the Preparatory Teachers' Certificate Examination.
- (2) The length of the course of training should be two school years.
- (3) The educational qualifications for admission to the course should be the senior local certificates.
- (4) Six stipends of Rs. 20 per mensem should be allotted annually and be tenable for the period of training.
- (5) The examination should consist of written papers and a practical test.

31 1

The written papers to be:-

					•	marks.		
(i)	Psychology .		•	•	٠	100		
(ii)	History of Education	•	•	•		50		
(iii)	Hygiene	•	•	•		50		
(iv)	Methods of Teaching	•		•		100		

The practical test to consist of two parts, (1) Teaching a class and (2) Handwork.

- (6) There should be two grades of certificate, class I and class II. To gain a first class certificate candidates must obtain not less than 60 per cent. of the aggregate marks in the written papers and be deemed worthy of a first class certificate by the examiners in the practical test; to gain a second class certificate candidates must obtain not less than 40 per cent. of the aggregate marks in the written papers and satisfy the examiners in the practical test. The authorities of the training class must hold periodical examinations, both theoretical and practical, in all subjects of the course. including 'teaching a class', and place the results of the examinations and the records of students in training (their note books and all practical work) before the examiners, who will take them into account in deciding all doubtful cases as to class.
- (7) The following syllabus is proposed:—

First Year.

Literature.—The object of this course is to train teachers to tell stories to children. Students should be made acquainted with suitable material and given practice in the art of telling stories, in illustrating them and in training children to dramatise them.

Suggested books of reference-

- (i) Method. "How to tell stories," Bryant (Harrap); "More stories to tell to children," Bryant (Harrap).
- (ii) Subject matter. "English Fairy Stories," Jacobs (Nutt);
 "Tales of Gods and Heroes," Cox (Kegan Paul);
 "Heroes," Kingsley; "Heroes of Asgard," A. & E.
 Keary (Macmillan); "Water Babies," Kingsley;

"King of the Golden River," Ruskin; "Jungle Book," Kipling; "Odyssey," Havell (Harrap); "Days before History," Hall (Harrap); "Our Empire Story," (Jack); "Child's Book of Literature," (Jack); "Pilgrim's Progress;" "Robinson Crusoe."

Geography.—(a) The geography of the neighbourhood, physical and general, taught practically; (b) Life in other lands, especially child life; (c) Voyages and discoveries.

Suggested books of reference -

"Typical School Journeys," Lewis; "Stories of other Lands," Duckworth (Cassell); "Under Other Skies" (Cassell); "Peeps at other Lands," Series (Jack); "Little Cousins" Series; "Story of the World," (Jack); "The World in Pictures," (A. & C. Black); "Seven Little Sisters," Jane Adams; "Highroads of Geography," (Nelson); "Man and his work," Harbertson (Oxford University Press); "Voyages and Discoveries," (Jack).

Nature study.—(a) Plant life; keeping a school garden. From observation of the growth of plants in the garden, or in boxes, the following studies: the parts of a plant, the conditions under which plants thrive, adverse conditions, experimental growth under varying conditions of (1) soil, (2) water, (3) light, and (4) air. The cycle—flower, fruit, seed. The common plants of the neighbourhood and their habitat. (b) Recognition of the common trees of the neighbourhood by means of leaves, bark and flowers. (c) Animal life; study of common insects in their environment, e.g., ants, spiders, bees; life history of frog and butterfly; recognition of the common birds of the neighbourhood by (1) form and colour, (2) notes, (5) habitat; relation to life and conditions as illustrated by colour, beak, shape.

Suggested books of reference-

"First book of Indian Botany," Oliver (Macmillan); "Elementary studies in plant life," Fritsch and Salisbury (Bell and Son); "Trees and how they grow," Clarke Nuttall (Cassell); "Flora Simlaensis," Collett (Thacker, Spink); "Open Air Nature Books," (Dent); "Wonders of Insect Life" Series, Martin and Duncan (Oxford University Press); "Birds of the Indian Hills," Dewar (The Bodley Head); "Bird Calendar," Dewar.

Singing and Physical Exercises.—Candidates will be required (a) to submit the names of three children's songs and to sing from memory one chosen, (b) to conduct a singing lesson or musical game, (c) to play, if possible, the music of games and marches, (d) to conduct exercises in rhythmic movements and finger play.

Suggested books of reference-

"How to train children's voices," Curwen; "Figure Drawing for Children," Curwen.

N.B.—The above courses should be taught to students in training in such a way as to give a knowledge (1) of the subject matter and (2) of methods of teaching it to Preparatory Classes.

Handwork: Block-building and floor games; brushwork; free paper-cutting; design making; weaving.

Note.—Candidates will be tested in (1) their own skill in handwork, (2) their knowledge of principles underlying the teaching of handwork, and (3) their ability to choose suitable exercises for children and to train them to onstruct group models.

Suggested books of reference-

"Handwork in Early Education," Plaisted (Oxford University Press); "Service of the Hand in the School," Bone (Longmans).

Second Year.

Handwork: Needlework; paper and cardboard modelling; clay modelling; basket weaving; toy-making; drawing, black-board sketching and class apparatus.

(N.B.—The note under handwork at the end of the first year course applies here also.)

Suggested books of reference-

"Educational Needlecraft," Swanson and Maebeth (Longmans); "Modelling in Cardboard and Leatherette," Taylor (A. Brown & Son); "Clay Modelling in Manual Training," Farrington (Blackie); "Toy-making," Polkinghorne (Harrap); "Toy-making for Infants," Pitman (Harrap); "The Origins of Invention," Mason (Scott Publishing Co.)

Psychology: An elementary study, with special reference to the characteristics and mental development of children.

Suggested books of reference-

"Talks to Teachers," James; "The School and the Child," Dewey, edited by Findlay (Blackie); "Studies of Childhood," Sully.

Hygiene: The physiological changes which take place in the development of children; the essential needs of a growing child and the formation of good physical habits; school conditions affecting the child's physical nature, how to recognise defects in the sense organs; fatigue.

History of Education: An outline study of the history of the development of the education of young children with special reference to the life and work of Froebel, Pestalozzi, Montessori.

Suggested books of reference-

"Educational Reformers," Quick; "The Montessori System," Smith (Harper & Bros.); "Montessori Examined," Kilpatrick (Constable).

Methods of Teaching: Methods of teaching the subjects of the school curriculum up to standard II.

Suggested books of reference-

"The Early Education of Children," Plaisted (Oxford University Press); "Kindergarten Teaching at Home," (Jack); "The Dramatic Method of Teaching," Finlay-Johnson (Nisbet); "Groundwork of Arithmetic," Punnett (Longmans).

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GRANTS-IN-AID TO SCHOOLS IN BRITISH INDIA

EDITED BY

J. A. RICHEY, C.I.E.,

Educational Commissioner with the Government of India.



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It is hoped that this summary of the very varied experience of the different provinces may be found of use when the revision of any particular system is undertaken.

J. A. RICHEY,

Educational Commissioner with the Government of India.

DELHI,

Ist December 1922.

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Grants-in-Aid to Schools in British India.

CHAPTER I.

Introductory.

Early History.

The grant-in-aid system was first introduced into India by the Board of Education of the Bombay Presidency. The Board, finding themselves in 1852 with a recurring allotment of less than two lakhs from which to finance their activities and having very liberal and progressive ideas as to their responsibility for education in the Presidency, adopted the plan of subsidising private schools in order to spread their financial assistance over as wide an area as possible. This "partially self-supporting system," as it was called, proved so successful that the Governor, Sir Henry Pottinger, on his transfer to the Governorship of Madras proposed to introduce the system in that Presidency also; but his proposal did not commend itself to the local council of education.

The despatch of the Court of Directors of September 1854 was the first authoritative pronouncement in favour of adopting the principle of grant-in-aid as the basis of the Indian educational system. The Court of Directors were moved to recommend this policy, which was indeed strictly in accord with the educational ideas of the time, by two practical considerations, firstly the insufficiency of the funds available for education, and secondly, their desire to make use of the indigenous schools of the country.

At the same time they recognised that the grant-inaid system by itself was not a perfect instrument for the spread of education in India. They say in their despatch: "In order fully to carry out the views we have expressed with regard to the adequate provision of schools throughout the country it will probably be necessary for some years to supply the wants of particular parts of India by the establishment, temporary support and management of places of education of every class in districts where there is little or no prospect of adequate local efforts being made for this purpose, but where nevertheless they are urgently required."

They regarded this alternative however as a temporary expedient and they looked forward "to the time when any general system of education entirely provided by Government may be discontinued with the gradual advance of the system of grants-in-aid."

By 1859 the weakness of the grant-in-aid system as an instrument for the spread of popular education had already been discovered. The Secretary of State in his despatch of April 7, 1859, writes: "On the whole Her Majesty's Government can entertain little doubt that the grant-in-aid system as hitherto in force is unsuited to the supply of vernacular education to the masses of the population; and it appears to them, so far as they have been able to form an opinion, that the means of elementary education should be provided by the direct instrumentality of the officers of Government according to some one of the plans in operation in Bengal and the North-Western Provinces or by such direction of those schemes as may commend itself to the several local Governments as best suited for the circumstances of different localities." The Secretary of State did not however declare finally against the grant-in-aid system as a means of providing elementary education; and the lack of any authoritative ruling in favour of either public management or grant-in-aid led to the adoption of different policies in different provinces.

Change of policy from 1882 to 1913.

The whole position was reviewed by an Education Commission in 1882-83. The Commissioners recognised "that the relation of the State to secondary is different from its relation to primary education in that the means of primary education may be provided without regard to the existence of local cooperation, while it is ordinarily expedient to provide the means of secondary education only where adequate local cooperation is forthcoming." They pronounced unhesitatingly in favour of the grant-in-aid system for secondary education, and although they did not absolutely condemn public management they showed very clearly their preference for the grant-in-aid system for primary education also. Consequently, even in those provinces where board schools were established, they were for long looked upon rather as model

institutions and as supplementing, where needed, the work of aided schools than as the basis of the primary school system. The recommendations of the Commission were accepted by the Government of India and in a resolution issued in 1904 they declared their policy to be "the progressive devolution of primary, secondary and collegiate education upon private enterprise, and the continuous withdrawal of Government from competition therewith." The first definite pronouncement of the Government of India in favour of public management as opposed to grant-in-aid was made in the Resolution of 1913 on Indian Educational Policy. For secondary education it is true the Government of India adhered to the policy of grant-in-aid, moved thereto not by any belief in the inherent superiority of private over State management, but by preference for an established system and above all by the necessity for concentrating the direct energies of the State and the bulk of its available resources upon the improvement and expansion of elementary education. In this sphere they say "expansion should be secured by means of board schools except where this is financially impossible, where aided schools under recognised management should be encouraged." They at the same time agreed that in some tracts liberal grants might be given to religious institutions which undertook to give secular instruction.

Some explanation for this change of policy, for it is nothing less, is to be found in the development of educational theory.

Although nowhere specifically so stated by the Court of Directors nor by the Education Commission of 1882 it is clear that the grant-in aid system was originally based upon the principle that it is the duty of parents to provide education for their children and their right to determine the kind of education which their children should receive, the duty of the State being to give aid where needed towards the provision of such education and its right, in view of the aid which it gives, to exercise some supervision over the education provided. [In the resolution of the Government of India appointing the Education Commission of 1882 it is expressly stated that "it is no doubt right that persons in good circumstances should pay the full cost of their children's education, or, at any rate, that no part of this should fall upon State funds."]

It is obvious that a system of education based on this theory can be entirely successful only in a community in which all the parents recognise their duty and are capable of exercising their right. With the growth of the realisation, particularly in democratic countries, of the importance of education to the State as contrasted with its benefit to the individual, the relations of the State and of parents towards education have been gradually reversed. Modern systems of education are based upon the theory that it is the duty of the State to provide, so far as its means permit, education for its future citizens and to see that that education is good: the duty of the parents being confined to supplementing the work of the State and their right to influencing through representative bodies the character of the education given.

Comparison of developments in England and India.

In England where the stages of progress from the original to the present position have been marked by legal enactments, the evolution of the modern system is more easily traceable than in India. In the sphere of primary education we find the State first increasing its grants to private schools, then establishing schools under public management, then assimilating its control over the two classes of institutions and finally introducing free and compulsory education. In the sphere of secondary education the operations of the State have been restricted for financial reasons to the distribution of aid from public funds to a limited number of institutions and to the establishment of scholarships; though legal provision has recently been made for a further step in advance, namely, the establishment of continuation schools and the enforcement of attendance thereat.

In India progress along the same lines has been retarded by reason of the immensity of the problem and the inadequacy of the resources available for its solution. While there has not been, nor is there likely to be, any departure from the system of grant-in-aid in the sphere of secondary (the few existing Government schools are intended to serve as model institutions), this system has been, slowly at first, more rapidly in recent years, superseded in the sphere of elementary education by a system of publicly managed primary schools as was foreshadowed in the Secretary of State's despatch of 1859.

The Commission of 1882 seem to have recognised, though reluctantly, the inevitability of this change when they wrote:

"while every branch of education can justly claim the fostering care of the State, it is desirable, in the present circumstances of the country, to declare the elementary education of the masses, its provision, extension, and improvement, to be that part of the educational system to which the strenuous efforts of the State should now be directed in a still larger measure than heretofore," and in their elaborate recommendations regarding the rights and duties of local boards in respect of primary education. It was not till 1913 that the policy of expansion primarily by means of board schools supplemented where necessary by aided schools was definitely accepted. There are still provinces in which the primary school system is based upon grants-in-aid. Only within the last few years has legal sanction been given for the introduction of compulsory education by local option.

Grant-in-aid in primary and secondary education contrasted.

The gradual supersession in India of the grant-in-aid system for financing primary education and its retention in the sphere of secondary education can be justified on practical no less than on theoretical grounds. Advocates of this system advance as a practical argument in its support that it encourages local effort and is therefore economical. Now the local effort which leads to the opening of a primary school is in the vast majority of cases different in character from the local effort shown by the founders of a secondary school. Leaving out of account those schools which are started primarily from religious motives such as, mission schools, maktabs and the monastic schools in Burma, we find that primary schools in India are usually started by individuals who hope to earn a livelihood by teaching. They are not founded with a view to meeting any educational need (except in so far as the prospective teacher naturally chooses a locality where he is likely to secure pupils) but from motives of personal gain. On the other hand the opening of a secondary school is ordinarily due to the concerted action of a group of public spirited persons in response to a local educational demand. The managers cannot hope to make any material profit from the undertaking; indeed they must be prepared, particularly in the initial stages, to incur considerable expense from their private means. Local effort in short in the sphere of primary education usually connotes the effort of an individual in the hope of gain; in the sphere of secondary education it connotes common action in the public interest. Even when local support in the shape of subscriptions has been forthcoming towards the opening of a primary school, this is almost invariably withdrawn or reduced when a grant is made to the school from public funds, so that it has been found in practice impossible to insist on such contributions as a condition of grant. On the other hand, it is usual to make the grant to a secondary school conditional on some contribution being made from private sources and local cooperation to the extent at least of maintaining suitable premises can be guaranteed by this means.

But it is as a means for diffusing and improving primary education that the grant-in-aid system has proved least successful. In early days when educational expansion was carried out by the attraction of existing indigenous institutions into the public school system no better instrument for the purpose than grant-in-aid could be devised. But that time is past. As a stimulus to the establishment of new primary schools where they are most needed grants-in aid are ineffective. It has been noted that no intending teacher is likely to open a primary school where the attendance of pupils is uncertain. Consequently we find private or aided schools multiplying and competing with each other in the more educationally advanced areas, while those which are in most need of education are left untouched. This objection does not apply to a secondary grant-in-aid system. The need for higher education does not arise except in centres where elementary education has obtained a firm foothold. Experience has shown that where this need arises local initiative will be forthcoming to start a secondary school.

Again the efficiency of a primary school depends upon the ability of the teacher. Where the teacher is himself the manager of the school, as is the case in nearly all aided primary schools, he is irremovable. The grant to his school may be so varied as to stimulate him to greater effort; but no manipulation of grants can convert into a good teacher one who is naturally incompetent. The complete withdrawal of the grant may, and probably will, result in a bad school being closed; but there is no guarantee that the next person to open a school in the locality will be any more competent than his predecessor. Contrast this position with that of the aided secondary school. Here

^{*}For a similar contrast compare the motives which have led to the establishment and maintenance of public and preparatory schools in England.

the teachers are employees of the management. It is possible, indeed it is usual, so to adjust the grant to a secondary school that the managers are encouraged to employ qualified teachers and to offer them satisfactory pay. In fact grant-in-aid can be used as a powerful lever to promote efficiency in secondary schools.

General characteristics of all good grant-in-aid systems.

I have now very briefly indicated the important part played by grants-in-aid in the development of Indian education and have also attempted to illustrate some of the advantages and some of the disadvantages attendant on the general acceptance of this policy. The success of any particular system of grant-in-aid depends however very largely upon the method by which the grants to institutions are assessed. The provincial regulations which will be found in the succeeding chapters show that in this matter the greatest variety is possible. In order to assist the reader to appreciate the reasons for these variations I propose to enumerate some of the many factors which must be taken into consideration when grant-in-aid regulations are framed, describing incidentally a few of the best known systems.

Every good system of grant-in-aid must in the first place be sufficiently elastic to allow for variations in the amount of grant to suit local conditions and the size and character of the institutions aided. It should on the other hand be sufficiently rigid to preclude any suspicion that one school is more favourably treated than another and to ensure to the managers of a well conducted school a more or less stable income.

All Governments lay down preliminary conditions for the award of a grant to any school. To qualify for aid from public funds a school must fulfil a local educational need and its financial position must be such that it cannot be maintained efficiently without the help of a grant: it must be open to inspection by Government and must conform to the general rules laid down by Government for aided schools. The foregoing conditions, although not always explicitly incorporated in the grant-in-aid rules, are required to be fulfilled by all schools accepting aid from public funds, nor can any exception be taken to them.

Analysis of various factors used for assessing grants.

The other conditions required of aided schools depend on the systems employed for calculating grants. These systems vary according as they adopt one or more of a variety of factors as the basis for the assessment of the grant and further according to the emphasis which they assign to the different factors used in the assessment. The following are the principal factors which may be used in such calculations with some account of their relative importance.

The grade of education provided.—No system excludes this factor. The rates of grant-in-aid, however, assessed, differ for secondary schools and for primary schools. In most systems the differentiation is carried further, different rates of grant being assigned to the different departments of a school, or even to the different sub-divisions of a department. The tendency in recent years has been to adopt as large a unit as possible, usually the school department, high, middle or primary. The grade of education cannot, however, be used as the primary basis for assessment.

The size of the school.—Obviously some account of this factor must be taken whatever methods are used for calculating grants. It has been and is still in many systems adopted as the main basis of assessment. In its simplest form a certain sum is allotted for each pupil in regular attendance at a school during the school year and the management receives at the close of the year a grant equal to the aggregate of these allowances. The chief merit of this system is its simplicity and its apparent fairness. The cost of a school must vary in proportion to its numbers and each unit of grant is assumed to represent so much education given to an individual child.

In actual practice this "capitation system" cannot be adopted without modification. The cost of educating a child in a secondary school is clearly greater than that of giving him an elementary education, so that the first factor (grade of education) is invariably brought in to modify the rate of capitation grant. This detracts from the simplicity of the system.

Again the cost of running a school does not actually vary in exact proportion to the number of children in attendance. For example, if owing to sickness in any year the number of children in a class falls from 35 to 30 the pay of the teacher cannot be proportionately reduced. The annual fluctuations in the grant do not therefore correspond to the slight annual variations in the cost of running the school.

In so far as this system encourages school managers to induce children to come to school it is good. But in that it

encourages them to have as large classes as possible without regard to the capacity of the teachers and to make unjustifiable promotions in order that the children may earn the higher rates of grant payable in higher departments it is harmful.

The system, though still applied to many primary schools in India, is not suitable for application to rural primary schools. The temptation which it gives to the poorly paid teacher of a rural school (and the pay of such teachers is proverbially poor) to collect small children to sit in school merely for purposes of grant is often too great to be resisted. There is little doubt that in many schools off the beaten track which are rarely visited by inspecting officers the attendance registers are far from reliable.

When this factor is adopted as the sole or the principal basis of assessment the quality of the education provided is entirely subordinated to considerations of quantity. A grant calculated on this basis provides no incentive to the management of a school to strengthen the staff either numbers or qualifications, still less to increase their pay. This factor therefore, though it must to some extent enter into all calculations of grant-in-aid, is only in rare cases even when modified by "grade of education" adopted as the sole basis for assessment.

The salaries of the teachers.—The "salary grant system" which depends on this factor alone for the assessment of grants had at one time a large vogue in India and its merits and demerits are very fully discussed by the Education Commission of 1882 in their report. Under this system the grant paid to a school is equivalent to a fixed proportion of the aggregate of the salaries paid to the staff subject to certain conditions as to the miximum and minimum salaries to be paid to teachers possessing particular qualifications. The advantages claimed on behalf of this system are that it encourages managers to employ a qualified staff and to pay them well. It therefore conduces to efficiency: the grant is easily assessed and is not liable to any considerable annual fluctuations.

On the other hand this system has certain obvious defects. It assumes as the sole basis of assessment what is after all only one of the factors determining the efficiency of a school. Its very simplicity, as in the case of the capitation system, is to some extent a defect. The grant is fixed automatically. There is no latitude for variation and consequently no incentive to the school authorities to improve either the attendance

or the material condition of the school or the quality of the instruction given beyond the bare minimum necessary to qualify for grant-in-aid. Moreover it shares with the "proportionate system" of which mention is made later the great defect that it favours the richer school at the expense of the poorer.

The quality of the teaching.—It is clear that this factor is one which it is very difficult to assess quantitatively; and for the calculation of a given sum of money, i.e., a grant, a numerical factor is required. Not only will the standard of teaching required by different inspectors differ, but the judgment of any one inspector on the merits of different schools is liable to be influenced by various extraneous considerations.

In order to eliminate as far as possible the personal equation the system of "payment by results" was instituted in England and was afterwards introduced into this country in 1865. Under this system the individual pupils are examined annually by an inspecting officer and a fixed grant is given to the school for each pupil who is adjudged by the inspector to have reached a certain prescribed standard of efficiency. This system was recommended for general adoption in primary schools in India by the Commission of 1882. It has been gradually displaced in every province by better systems, though it was in force in Burma and, in a modified form, in Assam till a very recent Its merits were very fully discussed by Mr. Orange in the Quinquennial Review of Indian Education for the period 1902-07. The system is now universally discredited and it is therefore unnecessary to reproduce this discussion. Apart from its simplicity and impartiality it was claimed for this system that it acted as a powerful stimulus to efficient teaching. ' But the merits of a school cannot be judged solely by the success of its pupils at examinations and in so far as it made examinations the main object of the thoughts alike of pupils and of teachers it exercised a baneful influence on the teaching in aided schools. The importance attached to examination results in Indian education is already sufficiently great without any additional pecuniary value being assigned to them.

Besides the mechanical "payment by results system" various attempts have been made to give some value to the factor of efficient instruction in the assessment of grants. In some parts of India, after the grant to a school has been calculated by means of other and more mechanical factors such as capitation and salaries, the inspector is given discretion to vary the total grant within certain fixed limits on a considera-

tion of the general efficiency of the school: Provided that the variations in the grant are so restricted that the management of a well established institution may count on a stable minimum income from this source, there is much to be said for this plan.

The "fixed grant" system, which is in force in parts of India, is an attempt to assess grants not on any one particular factor but after a comprehensive view of all the circumstances and needs of each institution. It was strongly recommended by the Commission of 1882 for employment in the case of secondary schools. This system possesses many advantages. grant assigned to each school should be sufficient and not more than sufficient for its actual needs. Due allowance is made for local conditions. Encouragement can be given in the shape of larger grants to schools in poor and backward areas. In short the maximum of elasticity is obtained under the fixed grant system. One special feature of it which might usefully be borrowed by other systems is the extended period, usually 3 years, for which the grant is fixed. The management of a school is thereby enabled to count on a steady income for a longer period than is ordinarily possible under other systems, a matter of no small importance when a staff is being recruited and their salaries determined.

The Government of India in their resolution on Indian Educational Policy (1913) clearly advocated this system.

The fixed grant system has, on the other hand, one notable disadvantage in that it relies upon a purely arbitrary method of assessment. There can be no guarantee to Government, more especially when grants are assessed by different inspecting officers, that the sums allotted for grant-in-aid from public funds are distributed impartially and to the best advantage. Still more is this assurance of impartiality required by the managers of aided schools. Unless the inspecting officer lays down for himself, in default of Government orders, some general rules for the calculation of grants, any notable variations in the amounts assigned to different schools of the same type cannot but give rise to complaints of unfair treatment. In short the fixed grant system requires that supplementary instructions be issued to inspectors to guide them in the assessment of grants; and this detracts from its simplicity.

The foregoing objections to this system do not hold good when it is applied to any small class of schools, the grants to which are assigned by a single officer. Consequently the fixed grant system is in vogue in most provinces for assessing grants to European schools. In this restricted sphere it apparently works well.

The income of a school from private sources.—One of the underlying principles of all grants-in-aid is the encouragement of local effort and it is therefore not unnatural to make the amount of a grant proportionate to the amount of local effort forthcoming, nor it is easy to compute this amount except in terms of cash. Fees are sometimes included in calculating the income of a school from private sources and not infrequently they constitute the only reliable or permanent ingredient in this class of income.

Under the "proportionate system" in its simplest form the grant bears a fixed ratio, e.g., 50 per cent. or 66 per cent., to the income of the management from other sources. If the object of a grant were to elicit local response and if this response always took the form of recurring subscriptions, then no better system could be devised to attain the desired object. But as a matter of fact the encouragement of local effort is only a secondary object of the award of a grant, its primary object being to assist the management to maintain an efficient institution. Consequently the factor of private income, though it is still used in some parts of India as a basis of assessment, requires modification before it can operate successfully.

Grants given on this basis will be much greater in the case of rich schools than in the case of schools in poor and backward areas. The system thus tends to accentuate inequalities and, since the annual allotments for grants are limited, to favour the rich at the expense of the poor. Moreover it is not the case that local effort can be gauged by the amount of annual subscriptions. Much local effort may have gone into the collection of funds for the building and equipment of a school, while the time and devotion required of the managers of a well run school, though not convertible into terms of money, are not negligible items.

One abuse arising from the operation of this system cannot escape mention. It has been found that when local recurring subscriptions are insisted on as a condition of grant these subscriptions sometimes represent enforced contributions from the staff in the shape of unauthorised deductions from their nominal salaries.

The danger of relying on this non-educational factor to the exclusion of such important factors as the size of the school, the quality of the instruction and the salaries of the staff is evident.

A modification of the "proportionate system" is that which makes the grant bear some fixed relation to the "approved expenditure " of the institution. At first sight this might appear to be closely related to the "fixed grant system" in that before deciding what should be classed as the approved expenditure of an institution it is necessary to examine all its circumstances and needs. Actually there is little in common between the two systems, for the fact that under the "approved expenditure system" some fixed proportion of the cost of maintenance must be borne by the management makes the amount of the grant depend on the income of the school from other sources. The introduction of the factor of "approved expenditure" may serve to limit the amount of grant in the case of rich schools (though in actual practice the difficulty of determining what expenditure may or may not be classed as "approved" weakens this check), but it cannot operate in the case of poor schools to increase the grant beyond the proportion fixed. Supposing for example that the rate of grant is fixed by the regulations at two-thirds of the approved expenditure. If the management of a school can only provide Rs. 1,000 a year towards its maintenance, their grant is limited to Rs. 2,000, though an income of Rs. 4,000 a year may be required to maintain the school in a state of efficiency. If on the other hand the management are able to provide Rs. 2,000 per annum from their own funds, they qualify for a grant of Rs. 4,000, and they will almost certainly receive more than the balance of Rs. 2,000 which would suffice for the efficient conduct of the school.

The material conditions of a school.—This factor, i.e., the suitability of the school building and the adequacy of the equipment is sometimes taken into account when grants are assessed. Ordinarily if used at all it is used as a negative factor limiting the grant. For example, deductions are sometimes made from a grant assessed on other factors if the school buildings are unsuitable or overcrowded.

In the foregoing summary some description has been given of most, if not all, of the factors which can be used for the assessment of recurring grants to aided schools and some account has been given of the simpler systems of grant-in-aid based on the use of one or more factors. From this description it may be deduced that a good system of grant-in-aid will employ more than a single factor for the assessment of grant and that the excellence of the system will largely depend on the correctness of the value which is assigned to each factor.

Capital Grants.

No such variety or complexity is found in the systems under which grants are given for buildings and equipment. Usually these are assessed on expenditure, the amount of grant being proportionate to the sum provided by the school management from other sources. The percentage may vary from one-half to one-third of the necessary expenditure, the former percentage being more usual in the case of equipment grants.

Certain conditions are ordinarily attached to a building grant such as that the management of the school shall refund to Government an amount equal to the grant in the event of the school being closed or the building diverted to other uses. In some provinces a useful provision is made for the employment of the Land Acquisition Act to enable schools under private management to purchase land or buildings which the owners are unwilling to sell on reasonable terms. The whole or part of the purchase money is made over by the school managers to Government which acquires and retains the property, leasing it to the managers for a nominal rental, the lease being subject to the usual conditions attached to building grants.

Grants to Local Bodies for education.

Apart from direct grants to schools provincial Governments also make grants to local bodies, district boards and municipalities for the support of schools which are maintained or aided by them. The systems on which these grants may be distributed do not differ essentially from the systems employed for assessing grants to individual schools. The simplest system, for example, that based on capitation, was long in force in England. The grant given to a local authority was equal in amount to the sum of capitation grants given for every pupil in regular attendance at the schools controlled by that authority. But a system based entirely upon capitation must work inequitably in the case of backward areas and the capitation grant in England was supplemented by special grants for necessitous and backward areas. This system has

not been adopted in India owing no doubt to the difficulty of checking the average attendance of pupils at small primary schools.

A "salary grant" system has been tried without much success in some provinces. Under this the contribution to a board is equivalent to a certain percentage of the aggregate salaries of the teachers employed in the schools controlled by the board. One disadvantage of this system is that the amount of the grants due from Government can only be known when the Boards submit their returns of expenditure on salaries for the preceding year. Government therefore incurs an unknown liability and accurate budgeting is impossible.

The "proportionate system" is more commonly in use, the grant from provincial revenues bearing a fixed ratio to the amount provided by the local authority from its own resources. The objects on which the money is to be expended are usually scrutinised by Government before the grant is given, so that this method of distribution approximates more closely to that which I have described above under the title of "approved expenditure system." The defects there noted have even more serious consequences when this method is adopted for the distribution of educational grants to local authorities. If the encouragement of local effort may without serious detriment to education be given undue weight when assessing grants to secondary schools, it should certainly be subordinated to the equalisation of educational opportunity in a good system of elementary education. The effect of an unmodified "proportionate" or "approved expenditure" system is to perpetuate illiteracy in poor and backward areas which are debarred by means and inclination from making satisfactory provision for education. It is true that under the Acts establishing local authorities some provision was made in most provinces, usually by regulations, for a minimum expenditure from local funds on education. This minimum varied very considerably from 3.2 of their net revenue (excluding Government grants and certain special items) in the case of Bengal municipalities to 25 per cent. in the case of district boards in the North-West Frontier Province. Other means of fixing this minimum expenditure were employed in other provinces. But these provisions have never been very strictly enforced and since the report of the Decentralisation Commission which advocated a relaxation of Government control over local finance they have very largely remained in abeyance. In any case these regulations did not ensure that the provision made by

a local body for education should bear any relation to the number of children in its area requiring schooling.

Under the "proportionate system" any expenditure above the recognised minimum is dependent not only on the interest of the local authority in education, but also on its resources. The offer of an enhanced Government grant cannot enable a board to spend more from its own funds on education if its income is stationary and is already allotted to the various services which it is its duty to maintain.

This difficulty was realised when Primary Education Acts were recently introduced in various provincial legislatures authorising the introduction of compulsory education by local option. The proportionate system has generally been adopted for the distribution of the grants made under these Acts; but, in order to enable local authorities to take advantage of the grants offered, provision has been made in some of the Acts enabling them where their resources are limited, to raise additional taxation in order to meet that portion of the new expenditure which must be provided from local funds. provinces where no such provision is made in the Primary Education Acts local bodies are empowered by separate legislation to impose special or additional taxation for educational purposes. It is not difficult to justify the adoption of the "proportionate system" in this case since the theory underlying local option is that the cause in which it is exercised must be one on which the local community feel so strongly that they are prepared to make special sacrifices for it. empowering local authorities to raise additional taxation for the purpose of introducing compulsory education the fundamental objection to the proportionate system, namely, that its effect is limited by the stationary nature of local revenues, is removed.

Relative responsibility of Government and local bodies for providing elementary education.

It may be and has been suggested that the same expedient should be adopted for the extension and improvement of elementary education on a voluntary basis.

This opens a wide question, *i.e.*, the relative responsibility of Government and local bodies for the provision of primary education, or as it is more usually put;—Is elementary education, to be looked upon as a national or a local service? The decision of this question depends in part on the system of

public finance. I have stated earlier in this chapter that the equalisation of the facilities for primary education is of more importance than the encouragement of local effort, especially where local initiative is likely to be weak. In earlier days Government and in later times local bodies have been encouraged to start primary schools under their own management without waiting for local initiative. This has tended in recent years to equalise educational opportunity within the area controlled by each local body. But the financial position of local bodies is in itself very unequal. Even if power were given to them to raise additional revenue for education, the poorer and more sparsely populated areas, granted that they were willing to tax themselves for this purpose, could not hope to compete in the matter of quality at any rate with the richer and more populous districts. The recognition of the national importance of elementary education therefore justifies Government in giving larger grants from provincial revenues to backward areas with a view to establishing a uniform minimum standard of education over the whole province. This tendency, i.e., for the central government to contribute to local funds for education grows rapidly with the extension of democratic forms of government. How far it is legitimate to go depends on the relative financial positions of the central government and local bodies. It would add disproportionately to the length of this volume to discuss this question at length. It is interesting to note that different solutions have been adopted in different countries. In France, for example, the direct charges for primary education are met by the State, except in the case of the larger municipalities; only indirect charges, such as the maintenance of school buildings, being left to local funds. On the other hand, in Prussia and other German States before the war over 70 per cent. of the cost of elementary education was met from local funds but this was rendered possible by the fact that the Central Government had surrendered certain of its taxes, e.q., the land tax and the building tax to local bodies in order to enable them to meet their educational charges.

The English system.

Lord Goschen attempted to introduce a similar system in England without success. The system at present in force in that country throws the responsibility for financing elementary education primarily on local bodies, though Government undertakes to meet a certain proportion of the approved expenditure of each local body. Various factors are used for the calculation of the grants and special grants are given to backward areas. But broadly speaking the English system does not differ materially from that described in these pages as the "proportionate system." As any student of recent educational developments in England will know the system has recently undergone severe criticism. The following extracts from the first interim report of the Geddes Committee on national-expenditure deal with this question:

national-expenditure deal with this question:

"Where in 1913-14 fixed or per capita grants were in force, they have now been largely replaced by percentage grants, while new grants introduced since that date have almost invariably been on the latter basis. The percentages vary from 20 per cent. to 75 per cent., the most frequent figure being 50 per cent.

The advantage claimed for the percentage grant system is that it provides a stimulus to authorities to improve the efficiency of their services; in fact, it is a money spending device.

The vice of the percentage grant system is that the local authority, which alone can really practice economy in these services, loses much of its incentive to reduce expenditure, especially when the larger proportion is paid by the tax-payer through the Exchequer. The deciding voice as to what money shall be spent is not that of the Government or the House of Commons, but that of the local authorities. The Departments are thus in great difficulties in framing estimates, for these are based on anticipations not of what the Department itself will do but of what hundreds of local authorities may do. The weakness of divided responsibility is manifest throughout.

We consider that percentage grant should be abandoned in the interests of economy and be replaced by fixed grants or by grants based on some definite unit."

Recent changes of system in India.

In India till recent years the same principle which the Geddes Committee seek to emphasise was universally accepted, namely that the responsibility for providing elementary edu-

cation should rest with local authorities and that the financial liability of Government should be confined to supplementing the resources of those bodies with a view to equalising educational opportunity and to improving the general standard of elementary instruction.

Although this policy has never been openly abandoned, it has in practice been superseded in several provinces. In the Bombay Presidency, in the United Provinces, in the Punjab and the North-West Frontier Province, for example, local bodies are now only required to find a certain fixed amount for education, usually expressed as a percentage of their revenues, while Government makes itself liable so far as its resources permit for all additional educational charges. is in fact the very reverse of the policy previously adopted. Instead of the Government grant being limited by its relationship to the sums which may be provided from local funds, the financial liability of local bodies is limited and the grant from Government is determined not by the amount contributed from local sources but by the educational needs of each area. In fact for a system of "proportionate" or "approved expenditure "grants a "fixed grant" system has been substituted. The amount of the grant is determined after a preliminary survey of the conditions and needs of each district and is usually based on a definite programme of expansion devised to cover a certain number of years. Except that the grants in the case of elementary education are so determined as to increase annually by fixed amounts the system does not differ in character from the "fixed grant system" applied to schools

In the Punjab the resources of each board are taken into consideration in the preliminary survey of local conditions and in the case of district boards whose revenues are increasing the provincial grants are liable to revision after a short term of years and are made conditional on an increasing amount commensurate with the increasing revenues of each board being provided from local funds; the liability of each board for education being assumed in every case to be 25 per cent. of its net revenues.

This system differs from those in force in other provinces, such as the United Provinces, only in that the actual resources and potential expenditure of each district board are taken into account, as well as its educational needs before the grant is fixed.

System recommended by the Central Advisory Board of Education.

The whole question of contributions for education from provincial to local funds is as may be seen from the foregoing very brief account one of very great complexity. It was discussed at the meeting of the Central Advisory Board of Education held in May 1922 which made the following recommendations for the consideration of local Governments:—

- (1) That Government should by legislation, if necessary, take measures to ensure a minimum expenditure on elementary education in each local area; that this minimum and the portion thereof to be met respectively from provincial and local funds should be determined by Government after careful consideration of the financial and educational needs and circumstances of each area and the claims of local services other than education.
- N.B.—It was recognised that in some areas, particularly in Madras, a substantial portion of this minimum expenditure not met by Government would actually be met from private funds, but local bodies should be held responsible by Government for seeing that the portion not met by Government was actually forthcoming from whatever source.
 - (2) That additional expenditure on elementary education above this minimum by local bodies should be encouraged by proportionate grants from Government and for the purpose of calculating this proportion the districts should be graded according to their needs and means.
 - (3) That local bodies should be encouraged to develop the higher stages of elementary education and to retain pupils throughout the full course by higher rates of grants in respect of expenditure on these higher stages.

The foregoing recommendations which can be supported on theoretical and practical grounds deserve careful consideration as a solution of a difficult problem offered by an authoritative body of experienced educationists.

In this introductory chapter I have attempted to avoid anything which might be construed into a criticism of the grant-in-aid systems actually in force in any province at present. A description of these systems will be found in the following chapters. They are constantly undergoing revision and it is hoped that the general remarks in this chapter may assist those engaged from time to time on the task of revision to avoid some of the errors which have vitiated past systems.

CHAPTER II.

Grant-in-aid System, Madras.

A. Institutions under Private Management.

I. Recurring Grants.

(a) Secondary.—Secondary Education including Second Grade Colleges.

Prior to 1899 grants were given on the "result grants" and "Salary grant" systems. In 1899 the "fixed grant" system was introduced and continued till 1906. Under this system the grant was fixed for a number of years, three to four, the amount being determined by a general survey of the circumstances and needs of the schools aided.

Since 1906 grants have been considered as supplementing the income for general purposes guaranteed from endowments, subscriptions, donations and other private sources. cludes any income that may be hypothecated to special objects for which grants are available under other provisions of the Grant-in-Aid Code and any income that may be appropriated by fee concessions. Expenditure however incurred by schools and scholarships up to 10 per cent. of their fee income subject to approved conditions of award is admitted. A school is aided ordinarily to the extent of an amount equal to the guaranteed income so modified. As very few schools possess endowments the system practically resolves itself into aiding a school to the extent of half the admitted net cost. managements are compensated for the loss of fee income from pupils of the backward classes for whom the fee is half that for ordinary pupils.

Theoretically the grant is fixed for three years but in practice it is found more equitable to assess it afresh each year on statements of the actuals of the previous year which in the case of high schools and colleges have been audited by an approved auditor and submitted by the managements.

The assessed grants may be reduced for deterioration in efficiency and failure to remedy defects in organization, discipline, instruction and accommodation pointed out in writing at a previous inspection; insufficiency of funds; deficiency of working days, and may be reduced suspended or withheld for falsification of registers, misrepresentation, violation of any

of the conditions of recognition or aid, or other proved fraud or irregularity. There is no provision for increasing the assessed grant for exceptionally good work.

Recurring grants are also given for Medical Inspection and as contributions to approved Provident Funds.

Only schools recognised by the Department are eligible for grant and they must ordinarily have worked 180 school days in the year and have an average attendance of at least 25 pupils.

- (b) Collegiate. Colleges. First Grade Colleges.—The amount of grant given to a first grade college is determined year by year by the Director on statements of the actuals of the previous year submitted. The general principles governing the assessment are the same as those for secondary schools but special consideration is had for the circumstances of each case.
- (c) Elementary. Elementary Education—Primary Schools.
 —In the case of primary schools the "results grant" system was in vogue from 1865 to 1906.

From 1906 to 1919 the system of awarding grants to primary schools was based upon three considerations:—

- (1) the number and qualifications of the teachers,
- (2) the average attendance, and
- (3) the general efficiency of the school.

Until 1913 there was a uniform rate of Rs. 36 per annum for each teacher employed throughout the year. In 1913 this uniform rate was superseded by different rates for teachers of different qualifications. They were Rs. 36 for each uncertificated teacher and Rs. 42 and Rs. 48 for each certificated teacher of the Lower Elementary and Higher Elementary grades respectively. In 1917 the rates were further raised to Rs. 48 and Rs. 60 per annum for certificated Lower Elementary and Higher Elementary teachers respectively while Rs. 120 was given for a secondary certificated teacher. 1919 concomitant with the abolition of capitation grants the rates were further enhanced to Rs. 48, Rs. 76, Rs. 92, and Rs. 168 for the four classes of teachers respectively, and again in 1921 the rates were raised to Rs. 48, Rs. 72, Rs. 96 for uncertificated teachers of the Lower Elementary, Higher Elementary and Secondary grades respectively, and Rs. 84, Rs. 96, Rs. 180 for certificated teachers of these grades.

With regard to (2) until 1913 capitation grants were paid at the rates of eight annas for each unit of the average attendance of the year. In 1913 the rates were raised to one rupee for each girl and for each pupil belonging to the declared backward classes. In 1919 capitation grants were withdrawn and grants were calculated solely on the number and the qualifications of the teachers employed.

Up to 31st March 1921 grants were assessed by the officers of the department on figures obtained at an annual inspection and were assigned at a conference of district inspecting officers presided over by the inspector who was the final arbiter. This conference was empowered to reduce the assessed grants by 25 per cent. because of defects or to increase it by 50 per cent. for merit. Sanction for increases and decreases in excess of these which were more particularly intended for Higher Elementary Schools and girls schools were reserved to the Director on the Conference's recommendation. Grant bills were issued by the department and except for small contributions made by some municipalities the funds were entirely provincial.

On 1st April 1921 the Madras Elementary Education Act came into operation and under its provisions the functions of the departmental officers in this regard were transferred to the District Educational Councils bodies consisting of ex-officio nominated and elected members. Grants are disbursed by the District Educational Council on the authority of the President from provincial funds placed at its disposal for this purpose.

To render a school eligible to receive grants it must be recognised by the District Educational Council and for teaching grant must previously have been admitted to the aided list by the District Educational Council.

(d) Professional. Professional and other institutions.— The amount of recurring grant paid to training, technical, industrial and art schools, home education classes, schools for defective children, sanskrit and superior indigenous schools and any other kind of special school is fixed year by year by the Director after a consideration of all the circumstances of each particular case.

Grants may also be given to managers of recognised training institutions to pay the stipends to students under training at the same rates as are paid to students in Government Training Schools.

II. Non-recurring Grants.

(a) Secondary schools, colleges and institutions other than Elementary.—Non-recurring grants-in-aid are made from provincial funds for equipment, for the repair and erections of buildings, for hostels and hostel rents and for acquiring land for buildings or play grounds.

Prior to 1912 grants for school buildings and for hostels were paid at one-third of the total cost. In 1912 in order to secure better accommodation for schools and to encourage managers to take greater advantage of the grant-in-aid system Government raised the proportion of grant from one-third to one-half. Since 1912 special treatment has, however, been accorded to applications for grants towards the erection of hostels and Government have sanctioned grants varying from one-half to the whole of the cost according to the special needs of each case.

In 1920 in order to facilitate a wider introduction of the teaching of science the maximum grant admissible for science buildings was raised to two-thirds of the total cost.

Prior to 1908 the Director had power to sanction half grants for buildings and equipment up to Rs. 200. The limit was raised to Rs. 500 in 1909 to Rs. 1,000 in 1912 and to Rs. 2,500 in 1915. In the year 1912 Gymnasia and games were included in the lists of objects for which a half grant might be given provided that the expenditure was to be incurred on objects of a permanent or quasi-permanent nature. In 1917 this restriction was removed and grants for games materials were admitted but limited to one-half the amount of games fees collected from the staff and pupils of the school concerned. As in the case of building grants for science laboratories the proportion of grants for equipment for science subjects was raised to two-thirds with effect from 1920. For the other purposes enumerated the proportion is still one-half.

Applications for grants for the purchase of play grounds received exceptional treatment. In 1914 a committee was appointed to consider the question of providing playgrounds for the schools in the City of Madras and Government after considering the recommendations of the Committee provided several schools with playgrounds at the entire cost of Government. Similar treatment was given to mofassil schools.

Until 1912 managers of aided institutions who received building grants were required to execute mortgage deeds as a security for the grants given. The period of the Government lien on the property was originally twenty years but was in 1915 extended to forty years. In 1912 the rule was modified to allow of exemption from the execution of a deed and in cases where the managing bodies are considered reliable deeds are not now generally insisted on. In 1920 Government decided that to render an institution managed by a society or association eligible for grants for the purchase of land and for the application of the Land Acquisition Act the society or association must be registered under some act of the Governor-General in Council.

Under the Grant-in-Aid Code Government retain a limited claim on all articles of equipment for which a grant has been given. If an institution closes within five years from the date on which the grant was drawn Government are at liberty to purchase the articles towards the supply of which a grant was given at a valuation to be made by an officer deputed by the Government for the purpose.

(b) Elementary Schools.—Grants up to half the cost are given to elementary schools for similar purposes and also for providing, with the help of the villagers village schools and living quarters for teachers which remain the property of the village. Before the Madras Elementary Education Act came into operation these grants were subject to sanction similar to that under II (a). Now grants for the same purposes and in the same proportions are sanctioned by the District Educational Council from provincial funds placed at its disposal. The District Educational Councils' powers of sanction are limited to Rs. 2,500 for building grants.

B. Subsidies to Local Bodies.

Prior to 1906 schools under Local Boards were treated under the Grant-in-Aid Code in the same manner as other schools.

From 1906 educational grants have been given to Local bodies entirely in the form of subsidies.

These subsidies were given either for specific purposes, e.g., the opening of a particular school or a number of schools for particular communities or purposes, erection of a particular building or buildings, increasing the pay of teachers when Government were satisfied of the need and that the resources of the local body were unequal to the expenditure,

or generally for assisting the local body to provide education. The first charge on a local body's resources were the needs of Elementary Education, Government laying down the principle that secondary education should be either self-supporting or be subsidised only by Provincial funds.

Owing to the rapid increase of demand for education of all kinds and the almost stationary resources of local bodies Government have within recent years shouldered a very largeproportion of the cost of the education controlled by local bodies. The financial assistance still takes the form of subsidies. There is however at present no general subsidising principle. Each subsidy is separately sanctioned and hypothecated to a specific purpose and distributed in the manner laid down. For example in Secondary education subsidies are given for the maintenance of college and secondary schools, for the opening of new middle schools in specified places, for raising particular middle schools to high schools, for particular appointments in particular schools, for increasing the pay of masters in particular schools, for the equipment of schools, for providing hostels for particular schools and for the creation of particular posts in particular schools. The subsidy may be recurring or non-recurring. In the former case subsidies are given year by year according to the sanctioning order. In all others specific sanction is obtained for each case.

The Director's powers of sanction are practically nil, Government retaining all powers for even the smallest item.

In subventing local bodies a difference is made between schemes of expansion or improvement initiated by Government and proposals originating with the local body. In the former case Government generally undertake to meet the cost, in the latter if the proposals are approved, the financial condition and resources of the local body are carefully examined and only so much assistance given as is beyond the ability of the local body to provide or to borrow. Assistance is also given in the shape of loans on which the local body pays interest and undertakes to liquidate by instalments within a specified number of years.

Under the Madras Elementary Education Act, to local bodies which introduce compulsory elementary education in their jurisdiction a provincial subsidy is given equal in amount to the income from the education cess levied under the Act.

CHAPTER III.

Grant-in-aid System, Bombay.

Historical.

The chief grant-in-aid codes of the Bombay Presidency were issued in 1891, 1901, 1903, 1911, 1913, and 1918. The code of Regulations for European schools prescribed by the Government of India was adopted in the Bombay Presidency in 1908 with certain modifications necessary to make it suitable to the circumstances of European schools in that Presidency. It was revised in respect of minor points in 1911, 1918, 1919, and 1921.

The basis of the Bombay system until 1903 was what is known as the results system. The codes of 1891 and 1901 both awarded "results grants" at so much per pupil per standard; but the latter added grants for optional subjects, which had been ignored in the former. Capitation grants for children between the age of 4 and 7 were also given.

In 1903 the system was radically changed and the grants were assessed on—

- (a) Building and equipment.
- (b) Attendance.
- (c) Staff.
- (d) Range and quality of teaching.
- (e) Discipline and conduct of students.
- (f) Provision for recreation and physical exercise.
- (g) Compliance with the rules laid down for the proper maintenance of school accounts and records.

In the code of 1911 no change in the system was made but the rules were amended and made more explicit, and provision was made for the free supply of books, slates, etc., for needy children in indigenous schools.

In 1913 the following changes were made-

- (a) The maximum grant in the case of primary and Anglo-Vernacular girls' schools in Sind was raised to one-half of the total expenditure.
- (b) A supplementary grant limited to one-third of the ordinary grant was allowed for any Anglo-Verna-

cular or English-teaching school for the efficient maintenance of which the ordinary grant was not sufficient. The object of the grant was to enable schools to improve their teaching staff and it was therefore required that at least two-thirds of the grant should be devoted to this purpose.

(c) An extra grant not exceeding 5 per cent. of the ordinary grant was allowed for books, slates, etc., in girls' schools and for money or other rewards for regular and punctual attendance.

The code of 1918, which still obtains, is only a reprint of the code of 1913.

The present system summarised.

- (1) Ordinarily the Government grant shall in no case exceed one-half of the local assets, or one-third of the total expenditure, of the institution during the previous official year.
- (2) Primary,* Anglo-Vernacular, English-teaching, and European schools.

The grants allowed may be classified as-

- (a) An ordinary grant based upon consideration of buildings and equipment, attendance, staff, range and quality of teaching, discipline and conduct, provision for recreation and physical exercise, and adherence to the rules laid down. This grant must not exceed one-half of the local assets or one-third to of the total expenditure.
- (b) Supplementary grants.
 - (i) For Anglo-Vernacular schools and Englishteaching schools for the efficient maintenance of which the ordinary grant is not sufficient not to exceed one-third of the ordinary grant, or one-half in the case of poor but deserving schools.

+For primary and Anglo-vernacular girls' schools in Sind the maximum grant may be raised to one-half the total expenditure.

‡Indigenous schools, Night schools, Industrial schools, and Normal schools do not come under this rule.

The maximum limit does not apply to Night schools, Technical schools, or Normal classes.

^{*}In Bombay a primary school is one in which no instruction in the English language is given.

- (ii) For girls' schools—for expenditure on books, slates, etc., and for money or other rewards for attendance not to exceed 5 per cent. of the ordinary grant.
- (c) Special grants for drawing based on the results of the annual examination (see Schedule I).
- (d) Special grants for school furniture and appliances, libraries, scientific and other apparatus for laboratories, workshops, or gymnasia, according to the funds at the disposal of the Department not to exceed one-third of the expenditure to be incurred.
- (e) Building grants.

For secondary schools not to exceed one-fourth of the total expenditure.

For primary and technical schools not to exceed *one-half* of the total expenditure.

- (3) Indigenous schools.
 - (a) Boys' or mixed schools. A yearly grant, roughly at Rs. 2 per boy and Rs. 4 per girl of average daily attendance, not exceeding Rs. 138.
 - (b) Girls' schools—Rs. 4 per girl subject to a maximum of Rs. 276. A special grant up to Re. 1 per mensem for proper record of attendance.
 - (c) Supply of slates and books for indigent children, not exceeding Rs. 15 a year.
 - (d) Advanced indigenous schools are aided under special conditions applicable to each case.
- (4) Night schools.
 - (a) A yearly grant not exceeding Rs. 100, calculated roughly at Rs. 2 per head of average daily attendance.
 - (b) A special grant up to Re. 1 per mensem for proper record of attendance.
 - (c) For large night schools attached to mills and factories with over 50 scholars the maximum grant may be Rs. 150.
- (5) Industrial schools.
 - (a) In addition to a general grant under (1) a grant not exceeding Rs. 20 for each boy or girl above the age of ten, or (2) a grant not exceeding one-half of the fixed salaries actually paid for the teaching of

industrial subjects and for the supervision of classes in which such subjects are taught. Also the one-third limit of paragraph 1 may be raised to one-half.

- (6) Normal schools. The grant is fixed by special agreement. Generally a grant equal to one-half of the expenditure is given.
- (7) Special institutions. Each case is treated on its merits. A grant equal to half the salaries of the instructors is usually allowed.
- (8) Colleges. Grants are allotted in accordance with paragraph (1), but the maximum grant is Rs. 10,000.
- (9) European schools. In addition to the ordinary grant described in paragraph (2) (a) above.
 - (a) A supplementary grant not exceeding 33 per cent. of the ordinary grant may be made to any school for the efficient maintenance of which the ordinary grant is not sufficient.

Instead of the ordinary and supplementary grants a fixed grant may be given.

- (b) Boarding grants. Rs. 12 per mensem for orphans and destitute children. Grants to cover the feepayments of poor day scholars; to be made at the discretion of the Department.
- (c) Cadet grants. Rs. 6 per annum for every efficient cadet and Rs. 8 for every extra-efficient cadet.
- (d) Special grants.
 - (i) To schools in places where there is a small or poor European population.
 - (ii) To new schools.
 - (iii) For the purchase of school furniture and apparatus, library books, etc.
 - (iv) For the purchase of appliances and materials for the teaching of carpentry, smith's work, cookery, household duties, short-hand and typewriting, drill, gymnastics, etc.
 - (v) Towards the cost of instruction in any of the subjects specified under (iv).
 - (vi) Towards the cost of instruction in a vernacular language.
 - (vii) For any other reason which Government may deem sufficient.

Definitions (Bombay).

A European school is one in which at least four-fifths of the pupils are of European or Indo-European descent.

An English-teaching school is one in which the proportion of pupils of European descent is not sufficient to constitute it a European school and which teaches the standards prescribed in Schedule C.

An Anglo-Vernacular school is one which teaches the standards of Schedule D.

A primary school is one in which pupils are taught through the vernacular in any of the standards fixed for the primary course (Schedules E to H).

Special institutions are such as Commercial schools, Sanskrit schools, Gymnastic schools, etc.

Industrial schools are classed as—

- (i) Technical schools proper which give combined instruction in theory and practice without any instruction in purely literary subjects.
- (ii) Schools which give practical instruction with little or no theory of the trade, industry, or profession they teach and which do not include any literary subject in the course of instruction.
- (iii) Schools and classes which combine literary education as an adjunct or complement of the manual or practical instruction in the trade or industry taught.
- (iv) Schools and classes which add manual training as a complement to the literary education imparted.
- (v) Girls' schools which teach an industry approved by the department to pupils who have either completed an approved course of instruction or are attending such a course in the same or some other recognised school.

Local Boards.

The award of Provincial grants to local bodies is not governed by the rules of the Grant-in-aid Code. Up to 1903 these bodies were paid grants on a system of contract, i.e., fixed grants equal to one-third of the expenditure in the year preceding that in which the grant was assessed. The grants were paid to assist the bodies to discharge their obligatory duty

of making adequate provision for primary education in their respective areas and were subject to revision when funds permitted, generally about every five years. The grants were raised to one-half the expenditure with effect from 1st September, 1903, to enable the bodies to carry out an extension of primary education. The principle of basing grants on expenditure was abandoned in 1905 and additional grants were given to those that were unable to supply their educational deficiencies. In view of the increasing inability of the Boards to meet their growing expenditure Government are now bearing the entire cost of the extension and improvement of primary education in Local Board area, e.g., giving Code pay to teachers according to the revised rates of pay, opening new schools, supplying additional assistants to under-staffed schools, etc. It may be stated that the Educational funds of the Boards are inelastic, depending as they do almost entirely on local cess (which represents 15 per cent, of the total expenditure), Government grant (82 per cent.), and fees (3 per cent.). The Boards have no power to raise additional funds.

Municipalities.

In 1885 the primary schools which existed in Municipal areas were transferred from the District Local Boards to the new Municipalities. Government made what were called "Contract grants" for the assistance of Municipal Boards in maintaining the primary schools transferred to them. schools so transferred were termed "Schools within the contract." The grant was to be equal to one-third of the Municipal expenditure on primary education at the time of the original transfer of the schools and was to be continued so long as the Municipality in each case maintained in adequate efficiency the necessary number of schools within the contract. The schools not transferred to the Municipalities, which included all Primary schools opened subsequently to the original transfer, were termed "Schools without the contract." and were aided in accordance with the rules of the Grant-in-aid Code.

In 1903 the limit of grant-in-aid was raised to one-half the total expenditure for schools "within the contract." In 1912 it was recognised that the ordinary grants fixed in 1903 had fallen far short of the limit of one-half of the gross expenditure. On this account it was decided to allow the Municipalities to participate with the Local Boards in the distribution of

certain special allotments for the benefit of primary education, provided that the aggregate of grants thus drawn did not in any case exceed the prescribed limit of one-half of the gross Municipal expenditure on that object. Subsequently in November 1912, grants were revised on this principle. reassessment of grants, however, was only periodic, depending on the funds at the disposal of the Department, with the result that the grants continued to fall short of the half expenditure limit in the case of those Municipalities whose expenditure had increased. In 1918, therefore, the contract system was discontinued and Government grants were thereafter revised annually, the grant in any year being equal to half the expenditure in the preceding year. In 1921 orders were passed whereby the grants of those Municipalities which were proved unable to meet the increased expenditure might be raised to two-thirds of the expenditure for a period of two years. A further concession given takes the form of advance grants, to be adjusted afterwards, given to enable Municipalities to tide over temporary financial difficulties.

The above remarks apply to Primary schools only. All Secondary schools maintained by District, Local or Municipal Boards are aided under the terms of the Grant-in-Aid Code.

Remarks on the working of the present Grant-in-Aid system.

Educational efficiency being in any country largely proportionate to expenditure, and especially so in India, it is clear that the system of basing the grant on expenditure is sound. It also clearly possesses the transcendent merit of not requiring the schools to consider only the quantitative side of instruction with their attention fixed on the "results" to be scored at the annual inspection and converted into hard cash. An additional advantage is that the inspecting officers instead of assessing barren results are free to assist with constructive criticism, while, at any rate theoretically, they are more likely to allow latitude in the matter and manner of teaching instead of slavishly insisting on the strict letter of the prescribed curriculum.

At the time of the introduction of the system doubts were expressed in some quarters as to its feasibility owing to the difficulty likely to arise from undue inflation, not to say falsification, of school accounts. It can, however, be stated with confidence that these fears have not been justified. Cases of fraud have been extremely rare and, though a few managers,

generally well known to the Department, seek to swell expenditure by the inclusion of doubtful items, and some even to mystify the inspecting officers by a system of accounts that would baffle a trained accountant, there is no doubt that the bulk of the amounts admitted for purposes of grant represents genuine expenditure. It must be remembered that it is always open to the Department to decline to give a full grant in cases where it considers the expenditure excessive; it must be admitted that some schools have got larger grants than they deserved owing to failure by the Department to act consistently on this principle, but instructions are now being issued that in assessing the grant attention is to be directed to the average cost per head in each school.

In practice, the maximum grant permissible is usually given, if the funds at the disposal of the Department permit, deductions being made only for gross deficiencies after due warning given. This practice appears to be reasonable. Schools are not likely to be improved by having their grants reduced and to treat the grant as a reward (or punishment) is unsound both in theory and practice. It is very desirable that the managers should know what grant they are going to receive, and that fluctuations should be avoided. That it secures this result, except when, as in this year, the grants have to be reduced owing to curtailment of the allotment at the disposal of the Department, consequent in this case on the reductions made in the Budget by the Legislative Council, is in itself a valuable asset to the system.

CHAPTER IV.

Grant-in-aid System, Bengal.

(i) Present grant-in-aid rules.

There are at present three sets of rules for grants-in-aid to private institutions of which two sets I and II are applicable to Indian institutions only:

- I. Rules for colleges.
- II. Rules for schools.
- III. Rules for European schools.

I. Grants-in-aid to colleges.

Previous to 1905 grants to colleges were regulated by general rules which were applicable to schools and colleges alike. In 1905 a special set of rules governing grants to collegiate institutions was published. Under these rules detailed information with reference to the finances, the buildings and the general organisation of the college was required to be provided in the application for a recurring grant-in-aid, and, except in special cases which had to be submitted to Government for sanction, the annual grant to a college could in no case exceed in amount the sum to be expended from private sources (exclusive of fees).

The rules provided for the payment of special non-recurring grants to private colleges which were not in receipt of regular annual grants, but only on the condition that the Governing Body of a College thus assisted could satisfy the Education Department that the college could be maintained in efficiency and that it would be open to inspection by the Department.

Annual grants were paid in monthly instalments on the submission of bills accompanied by a certificate from the Secretary to the Governing Body of the College to the effect that all salaries due for, and up to, the previous months had been paid.

The 1905 rules came under revision as a result of the reconstitution of Bengal and of the devolution of powers from Government to the Director of Public Instruction, Bengal and from the Director of Public Instruction to subordinate officers. For sometime after East and West Bengal were

reunited two separate codes of grant-in-aid rules were in force—one for institutions in the Burdwan and Presidency Divisions and the other for schools and colleges in East Bengal. These two sets of rules have since been co-ordinated and unified.

The present rules cover two kinds of grants:

- (a) capital or non-recurring, and
- (b) annual or recurring grants.

Capital Grants to Colleges.

Capital grants comprise grants of land and money grants for—

- (1) the purchase or acquisition of land,
- (2) the purchase, construction or extension of buildings, preparation of sites, etc.,
- (3) the execution of extensive repairs,
- (4) the provision of furniture and equipment, and
- (5) in special cases the payment of debts incurred in maintaining or improving the college.

Applications for grants are to be made on a prescribed formwhich provides for the examination of the character, efficiency and financial stability of the institutions concerned.

The amount of a capital grant may not exceed half the amount contributed from private sources except in special cases in which the sanction of Government is required. The Director of Public Instruction is empowered to sanction capital grants under these rules up to Rs. 10,000. Grants in excess of this figure require the sanction of Government.

Government land and land acquired for a college are required to be made over to the college authorities by a legal instrument, known as a license, which has been specially devised for the purpose. Capital grants are given on the explicit condition that the plans and estimates of the buildings, etc., are approved by the Public Works Department and the Department of Public Health and the title deeds by the Solicitor to the Government of India.

Provision for securing a lien on grants.

Formerly a lien on capital grants was secured by a trust deed which was duly executed and registered. The forms of

trust deeds under the old grant-in-aid rules were, however, found by the Government Solicitor to be defective as in most cases the authorities of the school, being themselves trustees, had no power to mortgage the property to Government. The use of trust deeds has therefore been discontinued, and instead, an undertaking on an eight anna stamped paper is now taken from the authorities of the school in which they undertake to conform to such legal requirements as may hereafter be imposed by Government to secure the full amount of the grant.

Under the existing rules a deduction of 5 per cent. per annum for each year is allowed. The lien therefore ceases after 20 years.

Recurring grants to colleges.

Annual or recurring grants are given in aid of the ordinary monthly expenditure and are paid monthly on the presentation of bills drawn up in a prescribed form.

The amount of such grants may not exceed half the amount contributed from private sources except under the special orders of Government.

Grants are to be applied for, and sanctioned, on prescribed forms which as in the case of capital grants, provide for the submission of data for the examination of the financial and general position of the institution and indicate the requirements laid down by the Education Department (and the University to which they are affiliated) which must be complied as a condition of aid.

Recurring grants are usually sanctioned for a period of 3 years but they are liable to revision at any time.

All grants are given on the principle of strict religious neutrality and no preference is shown to any institution on the ground that any particular religious doctrine is, or is not, taught therein.

Grants-in-aid to college hostels.

In addition to the grants referred to above grants are also given towards the cost of the superintendence of the hostels attached to colleges. The amount of grant may not exceed three-fourths of the cost, the balance of one-fourth being met from the college funds. The allowances of the Superintendents and Assistant Superintendents depend on the number

of	boarders	and	are	calculated	in	accordance	with	the	follow-
in	g scale:-								

	No. of t	oar	ders	Superintendeut.	Assistant Super- intendent.		
						Rs.	Rs.
20 boar	ders or less	•	•		,	20	,
Between	21 and 40			•		30	
**	41 and 70		-	•	•	45	2 0
**	71 and 100		•			60	30
,,	101 and 200					7 5	40
Above	200			•		90	50

The grants are sanctioned on the maximum number of boarders which the hostel can accommodate. But the allowances as well as the grant are paid on the actual number of boarders living in the hostel. Some colleges receive fixed monthly grants for this purpose.

II. Grants to Indian Schools.

The rules for grant-in-aid to schools for Indian pupils came under revision in 1905. Under these rules the scope of Government assistance was slightly enlarged and the conditions insisted upon were made a little more exacting; for instance in the revised rules, special schools for special classes of pupils were for the first time declared to be eligible for getting Government assistance and it was provided that temporary grants might be given in certain cases in aid of school boarding houses and hostels. On the other hand the employment of graduates and trained teachers as also the restriction of all teaching carried on through the medium of English to teachers who have passed the oral examination in English and pronunciation, were made conditions of Government aid and schools applying for assistance were required for the first time to give information on the following points:—

- (a) The class of children attending the school—their race and creed.
- (b) The social position and calling of the parents of the pupils.

- (c) The names and social standing of the members of the committee of management with a statement of the classes which they represent.
- (d) The qualification of the teachers.
- (e) The nature and size of the school and a description of the surroundings of the school.
- (f) The provision made for sanitary arrangements and the sanitation of the school building and compound.

The keeping of records by every aided school was also insisted upon.

On the readjustment of the boundaries of Bengal in 1912 and as a result of a scheme of devolution sanctioned by Government granting the administrative officers of the Education Department certain additional financial powers, the rules came under revision again and the present rules have been in operation since 1918.

The general principles governing the character and the conditions of the grant of financial assistance to Indian schools remain unchanged and are essentially the same as those outlined for grants-in-aid—both annual and special—to colleges.

Kinds of grants.

There are two kinds of grants—recurring and capital. The grants are paid on the managing committees of the schools agreeing to fulfil certain conditions, and, in the case of capital grants, when the plans and estimates are approved by the Sanitary and the Public Works Departments and the title deeds of the land by the local Government Pleader. The recurring grants are given in aid of ordinary monthly expenditure.

Capital grants.

Capital grants comprise grants or leases of land and money grants for:—

- (a) the purchase and acquisition of land,
- (b) the erection, purchase or extension of buildings and preparation of sites,
- (c) the execution of extensive repairs,
- (d) the purchase of furniture and equipment, and
- (e) the payment of debts in special cases.

The amounts of grants—recurring or capital—are subject to the following limits:—

High schools for boys. The grants do not ordinarily exceed one-half of the amount contributed from private sources.

Middle schools (boys and mixed). When the expenditure is more than Rs. 40 a month, grants do not ordinarily exceed two-thirds of the amount contributed from private sources.

In the case of all other schools, the grant does not ordinarily exceed the amount contributed from private sources. For the purposes of this rule, District Board and Municipal contributions are reckoned as receipts from public sources.

The above limit can be exceeded by the Director in special cases provided, in the case of a capital grant, the amount does not exceed Rs. 10,000.

All applications for grants to boys' institutions are submitted by the school authorities to the Divisional Inspector of Schools (through the District Deputy Inspector of Schools in the case of Middle and Primary schools), and for girls' institutions to the Inspectress of Schools. In all cases the District Officer is consulted and, if necessary, the Divisional Commissioner also.

Recurring grants.

Recurring grants are sanctioned by the Inspectors and Inspectresses of Schools. When the sanctioned budget is received; the amount provided for this purpose is distributed to them. If a grant in excess of the amount ordinarily admissible is to be given, the sanction of the Director is asked for.

Inspecting officers can also sanction capital grants up to Rs. 500 in each case subject to the limit mentioned above. For this purpose a certain sum (at present Rs. 3,000 for building and Rs. 1,000 for furniture and equipment) is annually placed at the disposal of each officer.

Grants towards the cost of the superintendence of school hostels.

In addition to the grants referred to above, grants are also given to schools towards the cost of the superintendence of the hostels attached to them. The amount of grant does not exceed three-fourths of the cost, the balance of one-fourth being met from school funds. The allowances of the Superintendents and Assistant Superintendents depend on the number of boarders and are calculated in accordance with the following scale:—

N	o. of	boarde	ers.		Superintendent.	Assistant Super- intendent.	
						Rs.	Rs.
20 or less	•	•	÷	•		15	
21 to 30		•	•	•		2 Ò	
31 to 40						25	10
41 to 50 .						30	15
51 to 75 .						40	20
76 to 100	•	•				50	25
Above 100	•	•			•	60	30

The grants are sanctioned on the maximum number of boarders which the hostel can accommodate. But the allowances as well as the grants are paid on the actual number of boarders living in the hostel.

Grants-in-aid of Primary Education.

Prior to 1903-04, aid to primary schools was regulated to a large extent according to the results of examinations, an exception being made in the case of schools in backward districts or working under other peculiar circumstances that justify special treatment. This system was condemned in 1901 as being uncertain in operation and tending to encourage cramming and a new system was introduced in 1902-03 in Bengal in accordance with which the remuneration of the quru from public funds took the form of a subsistence allowance paid quarterly and a further allowance paid at the end of the year, the latter depending on the number of pupils regularly attending the school, the nature of the instruction given and the general character of the school. In considering regularity of attendance allowance is to be made for local and seasonal conditions which might necessitate the closing of the school for certain periods of the year, such as the monsoon rains or the exigencies of cultivation or harvesting. The rate of stipends to be paid to teachers is left to the discretion of local authorities.

Primary schools in Bengal are mainly under the control and management of Local Bodies, i.e., District Boards and Municipalities and these bodies have power to apply such portion of their income as they may deem expedient to primary education. In addition to such funds as Local Bodies may set aside for primary education, contributions are also made from Provincial Revenues for the improvement and expansion of primary schools. These grants are distributed through the agency of District Boards in respect of primary schools situated in Board areas and through the agency of District Officers in respect of primary schools in non-Board areas and Muncipalities, and are intended to supplement those made by Local Bodies.

The grants made from Provincial Revenues are specifically given to raise the remuneration of teachers—the minimum rate* of aid for this purpose being Rs. 6 a month for trained and Rs. 2 a month for untrained teachers—and also for the training of primary school teachers.

In Khas Mahal or Government estates, Government sets aside 1 per cent. of the collections to be distributed among primary schools in Khas Mahals. This grant is supplementary to any other grants which the schools may receive under the general system.

Grants-in-aid—European Education.

Up to 1895 Government grants were paid to European schools on the "results grant" system. That system was abolished by a committee which was appointed by the Government of India to revise the Code of Regulations for schools under European management and grants for the maintenance of schools are now paid on the attendance system, the grants being calculated according to different scales prescribed for each class of institutions. Provision is also made for the payment of supplementary grants to schools "for the efficient management of which the maintenance grants are not sufficient." It is laid down that in the assignment of these grants the Education Department shall have regard to the improve-

^{*} This rate is fixed solely with reference to funds at the disposal of the Government and without reference to any standard rate of pay.

ment of the quality and pay of the staff and it is a condition of such grants that they shall not be applied to the reduction of fees or of voluntary subscriptions.

Instead of attendance and supplementary grants a contribution fixed for a term of years may be made to schools under conditions determined by Government.

A special grant of Rs. 10 a month per head, in addition to maintenance grants of all descriptions, is made in aid of boarding charges to Orphanages and schools which in the epinion of the Department provide an education suitable for orphans and destitute European children. The grant is also available for the children of the European poor in places where there are no schools.

A grant may be given at the rate of Rs. 7 per annum for every Cadet, Boy Scout or Girl Guide between the ages of 12 and 16 in accordance with certain principles laid down by the Government of India.

Special grants may, at the discretion of the Department, be given to new schools and schools in backward areas for the provision of books, furniture, apparatus, etc., and equipment for teaching special subjects. The managers are required to undertake to refund the amount of any grant made for furniture and equipment if the school ceases to exist within the 3 years from the date of payment.

Grants may be given to night schools for boys provided that scholars admitted to the schools are certified by the managers to be engaged during the day in some occupation which prevents them from attending a school. Grants are calculated on the basis of average attendance.

Building grants to European schools are given on the same general conditions as are prescribed for capital grants to Indian schools and colleges. Grants under this head may not ordinarily exceed one-half of the total cost or in localities where there is a small or poor European population the maximum grant may be equivalent to two-thirds of the cost.

CHAPTER V.

Grant-in-aid System, United Provinces.

PART I.—GRANTS-IN-AID TO ANGLO-VERNACULAR SCHOOLS.

RECURRING GRANTS.

Present system.

(a) Anglo-Vernacular schools for boys.

The following grants are made: -

- (i) Fixed grant.
- (ii) Attendance grant.
- (iii) Special grant.
- (i) Fixed grant—

•				Rs.
For high section		•	•	750 per annum.
For upper middle section .	•		•	400 ,,
For lower middle section .			•	250 ,,
For upper primary section		•	•	150 ,,

(No fixed grant is allowed to any section in which the average attendance during the past year is less than 8 in the high, 12 in the upper middle and 14 in the lower middle or upper primary section. Each section consists of two classes and the grant is liable to reduction by one-half if only one of the two classes included in the section is maintained.)

- (ii) The attendance grant is allowed according to the following scale:—
 - (a) For each scholar in average attendance in the high or middle section at Rs. 3.
 - (b) For each scholar in average attendance in Upper Primary at Rs. 2.
 - (c) For each scholar in average attendance in Lower Primary at Re. 1-8.
- (iii) Special grants are allowed in place of or in addition to the above two grants when the income of a school from

fees, private sources and ordinary grants is not sufficient to maintain it in efficiency. (When a special grant is made for the first year in aid of the maintenance of a school not hitherto borne on the grant-in-aid list it is called a preliminary grant.)

The conditions are—

- (a) The annual grant shall not as a rule exceed the difference between the annual cost of maintenance and income from fees and private sources or half the annual cost of maintenance, whichever is less.
- (b) No grant is made to a school the income of which from all sources is sufficient to maintain it in efficiency.
 - (b) Anglo-Vernacular schools for girls.

The rules laid down for boys' schools also apply to girls' schools, excepting that the scale of fixed grants in the case of a girls' school is as follows:—

			Rs.	
For high and upper middle	sections	together	680 per	annum.
For upper middle section	without	t a high		
section			350	,,
For lower middle section			350	,,
For upper primary section			420	,,

and that the average attendance should be not less than six scholars for a high or upper middle section, eight scholars for a lower middle section and ten scholars for an upper primary section.

N.B.—There are no separate rules for primary schools. Grants to colleges, normal schools, training classes for women teachers, Oriental institutions and hostels are governed by the general principle of grants-in-aid, viz., that the amount of grant shall not as a rule exceed the difference between the annual cost of maintenance and income from fees and private sources or half the annual cost of maintenance, whichever is less.

Historical.

Formerly the maintenance grants were divided into:-

- (1) Ordinary grants.
- (2) Special grants.
- (1) Ordinary grant was of two kinds:—
 - (a) Fixed grant. This was given at a maximum rate of Rs. 1,450 for a school having classes from the pre-

paratory to high sections. The grant for a middle school was Rs. 720 and that for an upper primary Rs. 420 and for lower primary Rs. 270.

- (b) A variable grant such as—
 - (1) an examination grant based on the result of the examination of the previous year. It was Rs. 22 per scholar for the high section, Rs. 7-8 per scholar for the middle section, Rs. 2 per scholar for the upper primary section and Re. 1 per scholar for the lower primary section, and
 - (2) a grant for discipline and organization for each scholar in average attendance during the school year, if in the high and middle section, a sum not exceeding Rs. 3, if in either of the primary and preparatory sections a sum not exceeding Re 1.
- (2) Special grants were allowed in addition to the ordinary grant earned (1) for a period not exceeding five years to a large high school in which a European Head Master of approved qualifications was entertained and (2) for one year only, to any school in a poor or backward district in which the local contributions were not sufficient with the fees and ordinary grants to meet the expenditure on the school.

The above rules were afterwards changed with the introduction of the Educational Code (provisional issue) and payment of fixed grants for the lower primary and preparatory sections was abolished and the rate of grant was fixed according to sections as at present in force, and the attendancegrant took the place of variable grant.

II. Non-recurring grants.

Present system.

- (i) Building.
- (ii) Furniture.
- (i) Building grants are made for the purchase of sites, erection, improvement or repair of schools, colleges or hostels attached to them. (No grant is allowed in respect of a Primary English School.) The amount of grant should not ordinarily exceed the amount of contribution from other sources. The managers are required to certify that

funds provided from other sources are sufficient with the grant to meet all claims and close the accounts. When applying for a building grant the manager is required to submit plans, estimates and specifications of the proposed building to the Director of Public Instruction through the proper channel. Before sending them to the Director the educational officer should examine the plans, estimates and specifications with a view to find out whether they conform to the educational requirements as regards lay out arrangement and size of rooms and other hygienic requirements. If he is in doubt regarding any particular point in regard to the general suitability of the plans, he may seek the advice of the local Executive Engineer. If the Director of Public Instruction approves the project, after consulting the Superintending Engineer on any point if necessary, he forwards it to Government for approval with recommendations as regards making a grant. Advances can be made out of the sanctioned grant according to the progress of the work. The final payment is made when the work is complete and a deed of hypothecation in respect of the grant sanctioned has been executed. By this deed the property is hypothecated to Government for a period of 20 years to the effect that if the property is utilized for any other than educational purposes the Government shall have a prior lien upon it for the recovery of a sum representing such proportion of the market value of the property as the grant bears to the present market value of the property on its completion.

(ii) Furniture grants are made for the purchase of furniture, fittings, books and appliances and should ordinarily not exceed the total amount contributed from private sources. The manager undertakes to refund the amount of the grant if the institution or Department in respect of which the grant has been made ceases to exist within five years from the date of payment. He is also required to satisfy the department that the purchases in aid of which the grant is made have actually been completed and that the furniture, books or appliances are of an approved kind.

N.B.—The code allows an endowment grant not exceeding one-half of the amount given or devised for the endowment of professorships, lectureships, teacherships, scholarships, laboratories, workshops, museums and other educational objects. So far no such grant has been made.

Historical.

The principle followed in making a building grant has always been the same. The procedure, however, till lately

was that before submitting the plans and estimates for approval they were examined and countersigned by the Executive Engineer, who also approved the site. The work as it progressed was examined from time to time by the Executive Engineer and advances from the sanctioned grant were from time to time made on receipt of a report from the Executive Engineer that the work was satisfactorily progressing. The final payment was made on receipt of a completion report from the Executive Engineer. There was also a limit prescribed for the amount of grant admissible such as, grants were not made for building Primary English Schools and under ordinary circumstances the grant for a Middle school would not exceed Rs. 3,000 and that for a high school Rs. 5,000.

Effect.

The effect which the system of recurring and non-recurring grants-in-aid has produced upon the education of these provinces can easily be determined by the rapid spread of education and rise in the number of educational institutions and of pupils. The majority of the high and middle schools in these provinces are provided with good buildings and are suitably equipped. A much larger number of applications for building and furniture grants is now received than before. Though the teaching staffs of Aided institutions are not well paid, they cannot be termed to be on the whole indifferently paid.

PART II.—THE DISTRIBUTION OF GOVERNMENT GRANTS TO LOCAL BODIES.

Grants to municipal boards.

In 1913 a recurring grant of Rs. 80,000 was distributed to municipal boards. The distribution was based on the two factors of the ability of the various municipalities to contribute to expenditure on primary education and of the number of boys of school-going age whose education had to be provided for within the next few years. The main conditions attached to these grants were as follows:—

- "(1) They must be spent in addition to the current educational provision in the budget of each board.
- (2) They must be used in actually increasing the number of children taught.

- (3) Without special permission they must not be applied to improving the pay or equipment in existing schools.
- (4) They must be used in consonance with the general educational policy of the Local Government."
- 2. In 1916 a further recurring grant of Rs. 73,390 was distributed on the principles followed in the above distribution. Government said that there would be no interference with local initiative but laid down certain principles regarding supervision, organization and staffing of the boards' schools and the distribution of grants-in-aid to aided schools; the grants were given on the condition that there would be no deliberate departure from these principles.
- 3. In addition to these grants assistance was given to four boards to meet the cost of entertainment by the board of an officer to supervise educational work in that municipality. These grants were made on the following conditions:—
 - "(1) That the board in its educational policy follows the general lines laid down at the time when the grant of Rs. 73,390 was distributed to municipal boards.
 - (2) That the board engages an officer of adequate qualifications and educational experience. If the board is unable to secure the services of a suitable candidate the Education Department will be prepared to lend the services of one of its officers.
 - (3) That the board delegates sufficient powers to the Superintendent of Education to permit of his exercising adequate control under the supervision of the educational committee."
- 4. Government have now agreed to give additional grants to municipal boards equal to two-third of the extra cost (recurring and non-recurring) of introducing compulsory education, including the cost of remitting fees, and are also prepared to give boards, who agree to introduce compulsory education, assistance to the extent of the total cost of bringing the minimum pay of their vernacular teachers employed in boys' schools up to the minimum rates prescribed for district boards; provided that the total contribution made by Government to the municipality on account of primary education shall not exceed 60 per cent. of the total cost of the same.

Grants to district boards.

In 1918 Government distributed to district boards Rs. 30 lakhs recurring for primary education. This amount was distributed amongst district boards according to needs. Boards were asked to draw up programmes for the progressive expansion of primary education. These programmes were revised by the Education Department and after revision the cost of giving effect to them was provided wholly by Government to the extent of Rs. 12 lakhs recurring in 1919-20, Rs. 5 lakhs extra recurring in 1920-21 and an additional sum of Rs. 5 lakhs recurring in 1921-22. These grants were given two main heads (1) Ordinary schools and (2) Islamia schools and maktabs. The allotments under "Ordinary schools" were given under minor heads, e.g., pay of teachers, provident fund for teachers in board schools, grants-in-aid to aided schools other than maktabs, contingencies, scholarships and training classes. The grants were subject to the following conditions: -

- "(1) The minimum rates of pay for teachers should be those prescribed by Government.
- (2) Facilities for the training of teachers in each district should be sufficient to provide a number of trained teachers each year not less than the number of new teachers who have died or resigned and to meet the demands caused by the expansion of education.
- (3) While the grants for the boards have been worked out in detail under various heads boards will be at liberty to transfer funds between these heads, provided they observe the conditions specified in the foregoing clauses. The amounts allowed for Islamia schools and maktabs may not, however, be diverted to any other purpose.
- (4) The amount of the grant given to a board in any one year will be the amount required to enable it to work up to the cost of its scheme for that year, diminished by the unutilized portion of the recurring grant for the previous year."
- 2. In addition Government distributed amongst the boards Rs. $22\frac{1}{2}$ lakks non-recurring towards the cost of primary school buildings on the principle that the amount to be allotted in any year to any particular board would be adjusted so that no board should have in hand a sum (including its own funds for

primary school buildings) exceeding Rs. 30,000, for carrying out its building programme.

- 3. In 1920 the Education Department drew up a programme for the expansion of vernacular secondary education in the districts. The cost of the programme was Rs. 4,04,900 recurring and Rs. 25 lakhs non-recurring. Government are bearing the whole of the cost. The non-recurring grants are being distributed according to the progress made by the boards in carrying out their building programmes, on the principle that no board should have in hand in any year more than Rs. 25,000 for the purpose.
- 4. In 1921 the pay of teachers in vernacular schools was considerably raised. Government met the total cost of the revision in 1921-22 (Rs. $17\frac{1}{2}$ lakhs) and will meet the total cost of the revision in 1922-23 (Rs. $20\frac{1}{2}$ lakhs) on the condition that in 1923-24 the boards will meet one-third of the cost, in 1924-25 half the cost and in 1925-26 two-thirds of the cost.
- 5. Government have assisted district boards also to give effect to schemes for the expansion of female education, and the education of the depressed classes. Rs. 61,990 recurring and Rs. 1,02,980 non-recurring were distributed amongst thirty-two district boards in 1921-22 on the condition that the boards would contribute an equal amount from their own funds to give effect to the programmes. Government met the whole cost of the scheme for the education of the depressed classes—Rs. 78,920 recurring and Rs. 7,350 non-recurring in 1921-22.

CHAPTER VI.

Grant-in-aid System, Punjab.

PRESENT SYSTEM.

- A. Secondary and Primary schools and Departments under private management.
 - (1) Recurring grants.—These comprise:—
 - 1. Block grants,
 - 2. Staff grants, and
 - 3. The special provident fund grant.
- 1. Block grants.—The block grant is based upon the average attendance during the three years preceding the inspection. The full rate per pupil in average attendance is:—
 - (a) Rs. 3 for classes I and II.
 - (b) Rs. 5 for classes III and IV.
 - (c) Rs. 16 for classes V to VIII.
 - (d) Rs. 24 for classes IX and X.

NOTE.—In the case of vernacular schools the rates for classes V to X are half of those given above. In girls' schools they are double for all the ten classes.

Each department of the school is considered as a single unit. In the case of schools whose instructional condition is considered only fairly satisfactory the rates are reduced by one-fourth. On the other hand in cases of exceptional merit, 25 per cent. can be added to the full rate.

- 2. Staff grants.—The staff grant is calculated on the salaries paid to the teachers and may not exceed one-third of the amount disbursed by the school authorities under this head. In boys' schools the grant is paid only to certificated teachers or graduate teachers. In the case of the latter, grants are allowed only for a period of three years from the date of their first appointment to a recognised school.
- 3. Calculation of maintenance grants.—The total grant under the heads, block and staff, conveniently called the maintenance grant, may not exceed three-fourths of the excess of the expenditure of the school on tuition over the income from fees. This expenditure consists of establishment and contingent charges to which are added the estimated value of the

services of teachers working gratuitously, the estimated rent of buildings held rent free and the rent of quarters provided rent free for the teaching staff on the condition that no aid had been given from the public funds for the purchase or construction of such buildings. The inspector is empowered to exclude items which he considers lavish.

4. Conditions of maintenance grants.—Maintenance grants are given subject to conditions which secure generally a certain standard of efficiency, conformity with departmental rules and regular inspection by departmental officers.

No grant is sanctioned for a school, the income of which from fees and endowments is sufficient to maintain it in efficiency; and which needs no further development to meet the wants of the locality.

The continuance, enhancement, reduction, suspension, and withdrawal of grants, once given, depend generally on the condition of the school as ascertained at the annual visit of the inspector paid for the purpose of assessing grants. To guard against undue hardship it has been ruled that if the grant to a school falls greatly below the average of previous grants through some misadventure for which the manager is not to blame, the grant earned may be raised to a sum not exceeding the grant of the previous year, or the average grant of the three previous years.

- 5. Hostel grants.—Maintenance grants not exceeding three-quarters of the excess of the approved expenditure over the receipts from boarders' fees are also made for school hostels on the condition that the average attendance for the preceding twelve months is not less than ten. To earn the full grant, the accommodation should be sufficient, the locality respectable, the sanitation satisfactory, the rooms properly lighted and furnished and the boarders effectively supervised. In the case of aided hostels for boys the fee charged should not be less than 75 per cent. of the rate fixed for the Government school hostel in the vicinity.
- 6. Special Provident Fund grant.—With a view to encouraging the institution of provident funds in aided institutions the award of a special provident fund grant has been sanctioned with effect from April 1919. The grant is payable monthly and is in addition to any maintenance grant earned by a school under the foregoing rules. The grant is assessed in April each year and is in amount equal to half an anna in the rupee of the total salaries of the authorised subscribers to

the school provident fund at the time of assessment. It is only payable on the condition that a like amount is provided by the school committee from other sources.

- 7. Elementary schools.—There is still in existence a class of school known as indigenous which receives grants under somewhat easier conditions. They are now known as elementary schools. They fall somewhat below the standard of efficiency prescribed for primary schools in staff, equipment or accommodation. These schools are useful as pioneer institutions in centres where the immediate success of a board school is not assured, or where a distinctly religious purpose is served. Inspecting officers are required to note that the ultimate object is to replace the elementary schools by board schools and when on religious or other grounds their retention is desirable the managers should be urged to bring them up to the level of the primary schools.
- 8. Rates of grants.—The block grant in the case of these schools also is calculated on the average attendance. These rates are:—
 - Rs. 2 for boys and Rs. 4 for girls with an extra Re. 1 per pupil for each industrial subject taught. The staff grant is based on the qualifications of the teacher and varies from Rs. 3 to Rs. 5 per month for men teachers and from Rs. 5 to Rs. 8 for women.
 - Proposals to raise the former to Rs. 4 and Rs. 7 and the latter to Rs. 6 and Rs. 10, respectively, are under consideration and orders are expected to issue shortly.

B. Historical.

1. Payment by Results.—The Education Commission which constitutes an important landmark in the history of education in this country recommended in the eighties of the last century the introduction of the system known as "payment by results." This mode of payment continued right up to the end of the last century. Under this system the award was adjusted automatically according to the number of pupils who passed examinations held in accordance with various prescribed standards. The inspection degenerated into mere examination, no time being left for appraising the general worth of the school or for affording helpful guidance to the teachers or managers in grappling with the larger and more

vital questions of organisation, discipline, and all round development on sound lines.

- 2. The system was fast losing its popularity and its abandonment in England prepared the way for the introduction in 1905 of the new system described in the earlier paragraphs of this note. It has retained its main features practically unaltered up to the present day. Whatever minor changes have taken place since then have left its essential characteristics untouched. The changes such as they are relate merely to details as regards rates of grant necessitated by the developments of the time; the increased insistence on the employment of trained teachers, the provision of hygienic desks and so The great rise in wages and prices of material in recent years owing to war and post war conditions could not but have effect on the grant-in-aid rates. Salary grants were consequently raised in this interval from one-fifth of the salary to one-third. Similarly the condition that the maximum grant should not exceed two-thirds of the difference between the expenditure on tuition and the income from tuition fees was also relaxed in order to enable the schools to comply more easily with the suggestions made by inspecting officers for improving their general efficiency. Accordingly it is now three-fourths of the excess that may be paid in grants instead of the old two-thirds of the difference between expenditure and the fee receipts. The block grant rates in their present form were introduced in 1920.
 - 3. The effect of grants.—The system sketched in the foregoing paragraphs is based on the salutary principle of self-help. It imposes on those that they may seek to come under its influence the need of spending something more than the income from fees.
 - 4. The fraction which managers are called upon to contribute from their own resources has been and is still a variable figure. The public funds ordinarily do not undertake to pay more than three-fourths formerly two-thirds of the difference between the expenditure on tuition and the income from fees. The recent improvement in the rate of block grant leaves little to be desired so far as well established and well attended schools in the more advanced parts of the province are concerned. But the same cannot be said of new schools or schools in areas where large attendances are uncommon and teachers in view of the general rise in wages due to the operation of economic causes demand high salaries. The increased

cost of equipment, repairs and other contingencies, has also added to the difficulties of the situation. Some provision will have to be made in the near future for the relief of institutions of the type under discussion. Apart from these exceptions, the good results of the system are evidenced by the net work of flourishing schools of the aided type which is spread over the greater portion of the province. The applications that still continue to pour in from all quarters are a good testimony to the liberal character of the grant-in-aid rules. The system has given great impetus to the expansion of secondary education and it is gratifying to testify to the zeal, enthusiasm, and spirit of enterprise shown by the religious societies, Sabhas and Anjumans availing themselves of the facilities offered by the Department.

Capital grants for buildings and equipment.

- (i) Under Article 71, Punjab Education Code, these grants are ordinarily limited to half the total expenditure in aid of which they are given, so that as a rule the Government grant is exactly equal to the expenditure from private sources. The grant for a high school building is usually Rs. 30,000. In some exceptional cases, however, a higher proportion of the cost is paid by Government. Grants for furniture, books and appliances are given upon the same principles.
- (ii) Building grants are made after obtaining the opinion of the Deputy Commissioner of the District, and, if the amount exceeds Rs. 5,000, of the Commissioner also. The plans must be approved by the Public Works Department, the rooms must be sufficiently commodious, and the management is required to show that the school is needed in the locality, that it is likely to be efficient, that it will be open to inspection and that the necessary funds to complete the building will be forthcoming.

Government, or the Local Body supplying the funds, retains the right of recovering the amount paid on account of grant if the buildings cease to be used as a school either of the class proposed or of a higher one, if the school ceases to be open to inspection, or becomes inefficient. The interest of grant, on the local body paying the grant is secured by means of a bond which is executed by the managers before the payment is made.

Grants for buildings and appliances are not payable until the building has been completed or the appliances purchased, but in the case of buildings, advances may be made from time to time as the work proceeds. Grants are occasionally made on similar terms for the cost of extraordinary repairs, or for paying off debts incurred in the provision of buildings.

GRANTS TO LOCAL BODIES.

A. Recurring Grants.

Historical.—Prior to 1910 there was no regular system of making grants to these bodies. The liberal subsidies granted from imperial revenues during 1904-07 rendered it possible for the Department to make large subventions to the boards for the expansion and improvement of facilities for mass education. The distribution was, however, on rough and ready lines, lump sums being handed over to the boards according to an estimate of their probable requirements, but without any guarantee that payments on the same scale would continue. No wonder then, that the Government and the boards found themselves, as the result of this haphazard system, in financial difficulties, which were accentuated by the temporary cessation of imperial grants and by the financial stress of those days in the province itself. In 1907 grants had consequently to be postponed and schemes of improvement set aside.

Proportionate Grants.—But more prosperous times were in sight. A grant of nine lakhs was received from the imperial revenues and the Government shortly after announced the "Durbar" grant. The system introduced at this period, 1910-11, was based on the salaries of teachers employed in board schools. According to it Government undertook to defray two-thirds of the salary of every qualified teacher in a vernacular school, plus all contributions made by the boards to teacher's provident funds, and half the cost of school repairs. The condition attached was that the teacher for whom a salary grant was claimed should be in receipt of a minimum of Rs. 15 if a head teacher, and Rs. 12 if an assistant. In addition, special recurring grants were made for backward districts, and grants were also given for capital expenditure in buildings. The net cost under this system to the boards for maintaining a vernacular school was approximately one-third of the pay of the staff employed, and still less in backward districts.

Their advantages.—These proportionate grants to local bodies not only enabled the boards to more than double the number of schools but also stimulated local effort in several

other useful directions, such as the improvement of the salaries of teachers in existing schools, and the creation of new facilities for the training of teachers.

Their shortcomings.—But the system had one fatal defect. It committed Government to an indefinite liability. Besides, it was not of much benefit to the poorer districts on whose finances even one-third of the cost of existing schools was a Hence a further change was announced in great burden. 1915. The variable grants assessed yearly under the superseded plan on the basis of salary payments and other local expenditure were converted into fixed grants—all grants given in one year became a final and recurring charge for the next year, subject to reduction for schools that might have ceased to exist. New grants for further expansion were given only for schemes previously approved by the Department and for which money had been passed by the Finance Committee of the Legislative Council. They were calculated not on the basis of individual teachers but of institutions.

The present system.—These revised rules had not been long in operation when the need for the adoption of a more vigorous policy to break down illiteracy in rural areas led to a comprehensive survey of the situation. A five-year programme of expansion was drawn up in consultation with the district boards, the ultimate aim being to establish a board school at every centre where an average attendance of not less than fifty children might be expected, provided that a distance of two miles by the nearest route should ordinarily intervene between two board schools. When the new scheme was launched there were 173 vernacular middle schools and 4,613 primary schools in the province. The five-year programme contemplated the addition of 132 middle and 1,463 primary schools, and it was estimated that expansion at the same rate for a further period of ten years would secure the realisation of the ultimate aim, viz., the provision of adequate facilities for vernacular education where such did not exist and the introduction of the principle of compulsion by local option where such facilities had been provided. In the new arrangements the Department was not to rest content with a mere increase in the facilities for mass education. Due provision was also made to see that improvement in quality kept pace with the increase in quanti-In order to secure this the scheme provided for improvements in the pay of the teachers, the conversion of inefficient indigenous schools into board schools and the strengthening of the staff in the larger schools by the appointment of assistants.

The financial aspect of the case was referred to a Committee on District Board Educational Finance. Their recommendations which were subsequently confirmed by the Government are reproduced below:—

"All districts shall be graded in respect of their financial position and capacity. To each grade will be assigned a fixed percentage.

The maximum future grant for a particular district in each year will be the sum of—

- (i) the basic grant, i.e., a sum equal to the recurring grants which it received in the preceding year; and
- (ii) an additional grant calculated by applying the grade percentage to the excess of the budgeted educational expenditure of that district for that year over the actual expenditure of the previous year, educational expenditure being understood as including that incurred on contributions to provident funds for teachers, and also the up-keep of buildings.

The actual grant made to a district board within the above maximum will be subject to the following condition:—

that the salaries of the teachers employed by the district board shall be on a scale approved by the Education Department."

In determining the grade of a board a number of factors were taken into consideration, e.g.—

- (a) the proportion of its net income excluding Government grants and income from school fees which the board spends on education;
- (b) the local rate levied by the board and its present liabilities and financial resources, actual and potential;
- (c) its normal annual surplus;
- (d) the actual amount of money required for the fulfilment of its five-year programme; and
- (e) the claims which the rural population had established for special support from Government, e.g., by the assistance rendered in the Great War.

Taking two-thirds as a liberal estimate of what Government should contribute towards the recurring expenditure for the province as a whole, the contribution in individual cases varies from 50 per cent. in prosperous districts such as Lahore and Lyallpur to 70 per cent. in Ludhiana, 80 per cent. to Rohtak and Kangra, while in recognition of the comparative poverty and the exceptional services of the rural population in Jhelum and Rawalpindi, Government bears the whole recurring cost of the five-year's programme in these districts.

The sources from which the boards may find the additional funds required for its educational programme are: -

- (a) the ordinary income of the board by diversion from other heads when its educational allotment is comparatively low. Twenty-five per cent. of its net income may be taken as a fair proportion for its educational expenditure;
- (b) enhancement of the local rate where it is less than the maximum;
- (c) the normal annual surplus; and
- (d) new taxation.

Municipal Committees continue as yet to be aided under the old system. Surveys, however, are in progress and the extension of the application of the new rules in their case is only a question of time.

The new policy of aiding district boards which owes its inception and execution to the energy and initiative of Mr. Richey has been instrumental in securing steady development in accordance with a pre-arranged plan. It has received liberal support from Government and the district boards also have made substantial progress in their expenditure on education. While the benefits of the scheme are undoubted, some modifications will have to be made, in the near future, in view of the financial strain it involves. The following quotation from the report on the progress of education for 1920-21 sums up the position:—

"If revenues could be made to expand in keeping with the educational programme, there is no doubt that much could be achieved. There is, however, great aversion from any increase in local taxation; and even where a 'haisiyat' tax, for instance, has been imposed, it has either not been realised or the collections are insufficient for local needs."

GRANTS TO LOCAL BODIES.

No scheme for the expansion of mass education on systematic lines could leave out the important question of the provision for suitably housing schools old as well as new. consequently announced Government in 1918. Mr. Richev's five-year programme was started, that it was prepared to contribute towards the non-recurring expenditure of district boards on vernacular education at the rate of 75 per cent. of the cost of approved projects in the case of boards graded at 70 or more for recurring expenditure and 50 per cent. in the case of other boards. This proportion was subsequently (1919) raised to cent. per cent. and 75, respectively. In view of the generous terms offered and the limited nature of the available funds it was stated that a selection would be made by the Education Department of the projects received and the board would be informed for which of their projects money would be forthcoming. making the selection the Department was to see that (a) every board shall receive a fair share of the available grant; (b) projects for which funds were not available during the preceding year shall receive precedence over all new projects; (c) preference would be given to projects towards which local contributions or private donations had been promised. Government, in conclusion, urged the importance of adopting well considered building schemes and the need for exercising as much economy and rapidity as was consistent with efficiency.

It is needless to say that the success of these beneficient measures will depend on the amount of money that will be forthcoming for the financing of the projects.

Prior to the initiation of the scheme above sketched, building grants were made to local bodies but on no settled plan. Ordinarily the share of Government towards meeting the cost of such projects was limited to 50 per cent.

Grants to board Anglo-vernacular institutions.—Until quite lately there was no recognised arrangement for grants-in-aid of Anglo-vernacular institutions maintained by local bodies. On rare occasions, however, lump sums have been given to necessitous boards as contributions towards the cost of erecting new buildings.

In accordance with the accepted policy of Government, vernacular education was to be the first object of their care, private individuals and associations under the stimulus provided by the liberal system of Government grants devoting their attention to the development of Anglo-vernacular education. This has been still further emphasied by the provincialisation of a number of board high schools quite

recently, the funds thus set free being utilised by the boards concerned in meeting the rapidly increasing bill for the programmes for the extension of primary education.

The conversion into Government institutions of the schools hitherto controlled by the boards has been effected on a purely voluntary basis.

CHAPTER VII.

Grants-in-aid System, Burma.

I. HISTORICAL.

The starting point.—The Government of Burma first undertook the supervision of education in 1866, when the first Director of Public Instruction was appointed. Standards of Instruction and rules for Grants-in-aid were laid down in 1871. These rules were revised in 1881, but the only change of any importance was that "aided non-indigenous schools," which had previously received aid in the form of a lump sum bearing a proportion to the total expenditure from private sources, and depending on the inspector's report, were now to have their grants calculated on the results of an examination of every class by the inspecting officer. The rules of 1881 are included in the first edition of the code, published in 1883. These make a convenient starting point.

The classification of schools was at first confusing. They were indigenous or non-indigenous, vernacular or Anglovernacular, high, middle or primary. From a minute on an early report it appears that the non-indigenous schools were mission schools following a curriculum more or less similar to that laid down for Anglo-Vernacular schools, and the desire to make these schools fall into line no doubt accounts for the introduction of payment by results. The curriculum for indigenous schools was a vernacular one. In the second edition of the code (1885) the distinction becomes more clear. It will be simpler to treat schools from the start as vernacular or Anglo-vernacular.

Grants-in-aid of Anglo-Vernacular Education, 1881.—Payments in aid of recurring expenditure were calculated on the results of examinations, but there were also grants for attendance, a higher rate of grant being paid on account of boarders. For each pupil who passed the departmental examinations, lower primary, upper primary, and middle school, grants were paid on each subject. Even if a pupil failed to obtain promotion, grants were paid on the subjects in which he was successful. Additional grants at a higher rate were paid for success in certain optional subjects. High school pupils and students in the F. A. classes added to the Government High school, Rangoon, in 1880, were presented

for the examinations of the Calcutta University and the grant depended on the class in which they were placed. Results grants and attendance grants paid on account of girls were 50 per cent. higher than those paid for boys. Results grants for Europeans were paid at twice the ordinary rates.

Supplementary grants "bearings some proportion to the annual expenditure on a school" might be granted to newly established schools, or to schools attended by comparatively uncivilised tribes, or to schools which were considered by the Director and the Chief Commissioner specially deserving of encouragement. These grants were limited to one-half the total expenditure, exclusive of boarding charges, in primary schools, one-third in middle schools and high schools, and one quarter in colleges.

Special grants were given for buildings, furniture and equipment on conditions similar to those which still apply to such grants.

1895.—The form of aid was modified in 1895. Supplementary grants were replaced by salary grants for certificated teachers, which enabled a school to obtain aid as soon as it was recognised. But results grants were retained, though payment of grants for partial success was abolished in 1889, and a merit grant, not exceeding one-third of the results grants, might be awarded for special efficiency. Maintenance grants appear for the first time in 1895. They might be awarded up to one-third of the total cost of the school, boarding establishment excluded, but the salary grants were included in the maintenance grant. These maintenance grants have no relation to the present maintenance grant.

The total grant to any school might not exceed the total of the contributions from private sources towards direct expenditure nor the amount of direct expenditure not covered by fees, endowments and contributions. In other words Government laid down the principle since followed, that it was not prepared to meet more than half the cost of the school, calculated according to certain principles, or permit the management to save out of grants.

1901.—Results grants (except for technical subjects) were soon afterwards abolished, and the maintenance grant went with them. In the fifth edition of the code (1901) grants were classed as (1) ordinary grants, (2) boarding grants, (3) results grants for technical subjects, (4) grants for build-

ing and equipment, (5) salary grants for certificated teachers, (6) fixed grants, (7) grants to normal schools, (8) extra grants. These last were paid for girls, for Europeans and for pupils of backward tribes in specified localities, provided they passed the examination of their standard. In 1905 special schools for Europeans were instituted and from 1909 onwards the extra grant for Europeans was paid only in European schools. Fixed grants were calculated on the average grants paid in the three years preceding and replaced ordinary, half salary, extra and boarding grants. The ordinary grant was calculated on the income and expenditure of the school. Subject to the rules in the preceding paragraph Government made good any deficit not already covered by grants paid.

The principles on which grants were to be paid to **normal** schools were not at first defined. The grant was a matter of arrangement between the school and the department. In the code of 1909 it was laid down that Government should pay the full salary of the head teacher and half the salaries of the remainder.

From 1901 to 1919 there was little or no change in the methods or principles of assessing the grants to Anglo-vernacular (and European) schools, though during a period of financial stress the salary grants paid by Government were reduced from half to three-eighths of the total salary in each case. In 1919 the present system was introduced.

Grants-in-aid of Vernacular Education, 1881.—Aid was given to indigenous schools in the form of results grants for each pupil successful at the examinations, higher rates being paid for optional subjects.

Salaried assistants paid by Government were also attached to approved schools on pay according to qualifications. The teacher received also a quarter of the results grants earned. These appointments were for a term only. At the end of the term the teacher might be transferred to another school, but if the villagers were willing to contribute towards his pay he might remain in the same school.

Karen schools received special treatment. Permanent salaries were paid at low rates to teachers who had passed Standard II, III, IV or V in Burmese and arithmetic and were certified as competent to manage a school. With some modifications to ensure better qualifications on the part of the teachers the special system continued till 1903.

"Private schools" managed by a master holding a teacher's certificate were eligible for attendance grants, in addition to results grants, for each pupil who had attended 100 days and passed the examination, and for a first equipment grant on opening the school.

Grants were paid to indigenous schools for building and equipment, either as free gifts or as advances repayable by instalments. Free grants were regulated according to the amount contributed by the villagers, and the building constructed with the help of a free grant was regarded as the property of the village.

In 1884 the position of certificated assistant teachers was modified. They were no longer to be Government servants, though they were to be paid either from provincial or municipal funds. In the following year, impelled thereto by the constant and rapid rise of the cost of vernacular education, Government lowered the rate of results grants and, by the addition of a lower grade to the cadre, reduced the cost of the certificated teachers. In 1888 further measures of economy were taken. Results grants payable in money to monastic schools were abolished (they were restored four years later) and the disbursing authority was empowered to refuse results grants to any school in which fees were not charged.

1901-1919.—In the code of 1901 grants for vernacular schools were thus classified:—(1) results grants—with merit grant, (2) salary grants to pupil teachers, (3) grants for building and equipment, (4) temporary salary grants, ordinarily for two years, to certificated managers of new schools. 1894 the permanent certificated teachers had been replaced by Itinerant Teachers. In this year pupil teachers were first recognised. Fixed grants were sanctioned in 1905, boarding grants in 1908. In 1905 half salary grants to certificated assistant teachers in vernacular schools were sanctioned, and in 1911 certificated managers were entitled to permanent salary grants. In 1909 the Itinerant teachers were abolished. In 1911 a maintenance grant calculated on attendance was sanctioned, but it was never introduced into the great majority of the schools. In the same year "B" class schools were made eligible for capitation grants. These were schools teaching reading, writing, arithmetic and having regular sessions and courses of study, but not conforming to departmental standards.

Provision of tunds.

At first the allocation of funds from the various sources of revenue followed no principle that can be clearly discerned. In the earliest report for 1867-1868, expenditure is classified under the heads Imperial funds, fees and "other local sources."

The last head clearly includes subscriptions and mission contributions. There was no expenditure from district cess funds on education. The Director, Mr. Hordern, calls attention in his report to the fact that one-fifth of the 5 per cent. cess on land revenue is alloited by the Government of India to Education. This fund had been accumulating since 1865, but no use was made of it till 1870-71, two years after the Government of India had ordered that it was to finance primary education.

In 1872-73 the heading Imperial funds disappears, and the classification becomes Provincial Funds, local funds or cesses, proceeds of endowments, fees and fines, and other sources. The report for 1874-75 notes that the district cess was unable to meet the charges debited to it, and provision was made in the budget for the following year for the payment of half the cost of Government primary town schools and all charges for inspection from Provincial funds. This does not appear to have been a permanent arrangement. In 1877-78 the educational part of the cess in many districts was bankrupt, though it appears from the report that "non-indigenous lower class schools" (under missionary management) were aided from provincial funds. In the report of 1879-80 thirteen such schools are shewn to be in receipt of aid from provincial funds.

In 1878-79 Government middle class schools in municipal areas and all town schools were transferred from provincial to town funds. But town funds were allowed contributions from provincial funds. This was the beginning of the attempt to enforce that principle of local responsibility which had to be abandoned, so far as Anglo-Vernacular schools were concerned, forty years later. In 1879-80 municipal grants first appear in the accounts. At the same time the distinction between indigenous and non-indigenous vernacular schools vanishes, and schools are classed according to grade as "high and middle" or "primary" and according to management as "Government" or "aided." From the 1st of April, 1882 "all aided schools and indigenous schools" (the old term re-appears) were to be financed from local funds if they were inside town limits.

This somewhat chaotic state of affairs is reflected in the annual reports and in the classification of schools, which rests on a cross division. There are two curricula, vernacular and Anglo-Vernacular, but schools are classed merely according to grade, and one learns from a casual remark in a Government minute that the schools called "non-indigenous" are mission schools following generally a curriculum similar to that followed in Government Anglo-Vernacular schools. The introduction of payment by results in Anglo-Vernacular schools seems to have been due to a desire to bring these schools into line with Government schools.

An examination of the abstract of expenditure for 1882-83 the first year under the revised grant-in-aid rules, shows that the grants to aided schools were met from district cess and municipal funds, with the exception of an odd Rs. 202 recurrent charges and Rs. 8,250 for buildings debited to provincial funds, together with the cost of European orphan, boarder and apprentice stipends and of scholarships tenable in colleges. But from the very first the theory that local revenues were to provide for the cost of education had to bebolstered up with extensive fictions. Municipal and town committees were relieved from sundry charges which they had met hitherto and received in addition grants from provincial revenues. The extent of these grants may be inferred from the rise of Municipal expenditure on education in 1882-83 -Rs. 1,82,095 as compared with Rs. 33,558 in the previous years. At the same time expenditure from district cess on education fell from Rs. 64,837 to Rs. 53,350.

An opportunity of squaring facts with theory to some extent and of preventing much trouble that subsequently arose was missed in 1879, when the local cess on land revenue was doubled. By this change educational funds did not benefit, for their share of the cess was reduced from one-fifth to one-tenth and the other tenth allotted to rural posts, which might reasonably have been financed from provincial funds. In 1902 a compromise was effected. It was ordered that district cess funds should meet the cost of education up to 15 per cent. of their total income and might even spend to 20 per cent.—the proportion that should have been compulsory. Beyond that limit they could not go without the permission of the Local Government, who undertook to assist local funds that were clearly unable to bear even the 15 per Thus the 20 per cent. limit, which ought to have been a minimum, became the ordinary maximum. In 1883 Government looked forward to the early introduction of a schemefor the control of rural schools as well as of their finances by rural boards. Events proved that the scheme was to be delayed for more than thirty years.

From the first municipalities were eager to divest themselves of their responsibilities. Moulmein was allowed in 1884 to hand over the management of educational affairs to the department, and in 1889, Rangoon followed suit. found the burden of Anglo-Vernacular education, which naturally became concentrated in the towns, intolerable. The municipal expenditure on education was to a very large extent merely the spending of provincial subsidies. Thus it appeared to be very much larger than it really was, and not till the year 1898-99 does the expenditure from district cess funds exceed that from municipal funds as shown in the accounts. In 1901 Government had three Anglo-Vernacular schools, municipalities managed 14. It then was resolved to relieve municipalities as soon as possible of responsibility for Anglo-Vernacular education. The process of taking over municipal Anglo-Vernacular schools was complete in April 1917. From the same date provincial funds bore the entire cest of Anglo-Vernacular and European education. latter class of schools had from their first institution in 1908 been a provincial charge. To balance this transfer the cost of vernacular education was to be borne by local funds without aid from provincial funds.

In practice, however, a clean separation was impossible. In Upper Burma where there is no cess and where all education had been financed, except in Mandalav municipality,* from provincial funds, practically the whole cost of vernacular education is still borne by provincial funds paid in the form of contributions to local funds. In one or twofrontier villages there are still Government vernacular schools. Some districts and municipalities in Lower Burma still receive aid from provincial funds, and results grants for technical subjects in vernacular schools are still debited to provincial funds. All normal schools and training classes and certain special schools are financed from provincial funds supplemented until recently by special grants paid by the Government of India. The constitution of the Divisional School Boards to manage vernacular schools with effect from the 1st April 1917 was a long step in the direction of local control. The devolution of responsibility will only be complete when

^{*} Mandalay municipality was ordered to assume responsibility for all educational charges from April 1st, 1899.

the Rural Self-Government Act and the revised financial arrangements come into force.

In theory under the Rural Self-Government Act Vernacular education in the Districts will be financed from Local Funds administered in each District by the District School Board. How far the District Funds will still be dependent on subsidies from Provincial revenues, it is impossible for me at this stage, to say, but Government has accepted the responsibility, at least as a temporary measure, of meeting by means of lump contributions to District Funds, charges incurred by Local Educational authorities in providing instruction in English as an optional subject in certain selected Vernacular school.

II. Existing rules determining Grants-in-aid.

Anglo-Vernacular Schools and Schools for Europeans.

The Grants-in-aid Code.—A thorough examination of the it affected Anglo-Vernacular, Grants-in-aid system $\mathbf{a}\mathbf{s}$ European and Vernacular schools was made in the latter part of 1918, and a new and greatly simplified Grants-in-aid Code was issued and came into force in the following year. Code applies to all schools under the direct control of the Education Department but not to schools controlled by local authorities. The former schools include all aided Anglo-Vernacular schools, all aided schools for Europeans, all aided Training schools for teachers and such aided special schools -e.g., Technical and Commercial schools and schools for the Defective—as may most conveniently be controlled by central authority.

Grants-in-aid are of the following kinds:-

I. Recurring Grants.—

- (i) Maintenance Grants-
 - (a) to schools for general education;
 - (b) to special and normal schools.
- (ii) Miscellaneous Recurring Grants.

II. Non-Recurring Grants.—

- (i) Grants for Buildings and Building sites;
- (ii) Grants for Furniture, Books and Equipment.

The rules conditioning grants to schools for general education are the same for all schools of this class. No

distinction of any kind is made between Anglo-Vernacular schools and schools for Europeans.

The amount of Maintenance Grant paid to Special and Normal schools is fixed for each school by the Director in general accordance with the rules applicable to schools for general education. In practice the amount of the grant payable to Special and Normal schools is fixed by the Department in accordance with the needs and deserts of each school.

The Maintenance Grant.—The most important of the Recurring grants is the Maintenance grant, the rules governing which are very simple and may be given in full:—

Rules

Maintenance Grants in schools for General Education.— Maintenance grants shall not ordinarily exceed one-half the difference between the approved recurring expenditure and the income which would have been derived from tuition fees at standard rates, minus ten per cent. for free pupils; provided that no deduction shall be made for free pupils from the calculated fee income of schools which levy fees above standard rates. Approved recurring expenditure shall include expenditure on the teaching staff, servants, rent, taxes, petty construction and repairs and all approved recurring charges other than those for which Miscellaneous grants are payable. In schools where the teachers receive no salary or a merely nominal salary, an estimated salary approved by the Director of Public Instruction may for the purposes of this rule be entered on the expenditure side of the accounts.

"Standard Rates of Tuition Fees.—The standard monthly rates of tuition fees are as follows:—Standard I (including the Infant section in European schools) Re. 1; Standard II, Re. 1-8; Standards III and IV, Rs. 2; Standard V, Rs. 3; Standards VI and VII, Rs. 3-8; Standards VIII, IX and X, Rs. 5."

Underlying Principle.—The general principle underlying the rules is that Government and the management should contribute equal sums towards meeting the difference between income and expenditure, but as the only source of income which is taken into calculation is income from tuition fees at standard rates; as many schools—in particular schools for Europeans—levy fees at rates considerably higher than standard; and as managing bodies often have sources of income other than their general education fund, the expenditure

which is actually to be incurred by the manager may be very decidedly less than the amount contributed by Government. Further the rule is so worded as to allow the Department, for sufficient reason, to sanction a Maintenance grant in excess of the amount ordinarily payable and to afford special relief to schools to enable them to meet an emergency. In the current year extraordinary relief has been given under the ordinary rules to many Anglo-Vernacular schools whose finances were seriously affected by the recent political or semi-political disturbances.

How applied.—As one of the principal objects of the Grants-in-aid Code is to encourage managers of schools to incur expenditure calculated to render the schools more efficient, the conditions laid down in the rules are interpreted by the Department as liberally as circumstances permit; and in fact no reasonable expenditure which makes for efficiency is disallowed. Foremost amongst items of expenditure making for efficiency is expenditure incurred in paying adequate salaries to a duly qualified teaching staff. A minimum scale of salaries has been laid down by the Department, and no salary proposed to be paid to a teacher in an aided school would be disallowed if the salary were not greater than the salary which, in a Government school, is paid to a teacher with similar duties and similarly qualified.

Miscellaneous Recurring Grants.—Miscellaneous Recurring grants include salary grants for additional subjects such as Manual Training, Slojd, Physical Training, Singing, Needlework, and any other subject approved by the Director by general order. Additional subjects are distinguished from Main subjects in that the former, though they may be compulsory (e.g., Physical Training) need not be taken into account in determining promotions.

The Salary grant for additional subjects must not exceed half the actual salary paid to the teacher of any subject other than Weaving and Drawing, to teachers of which subjects full salaries may be paid by Government.

Results grants for additional subjects are paid on the results of examinations conducted by the Department, and are fixed according to subject and standard; thus for each successful candidate from Rs. 2 to Rs. 14 for Slojd; from Re. 1 to Rs. 4 for Needlework; from Rs. 2 to Rs. 5 for Gymnastics and so on.

Grants ordinarily not exceeding Rs. 3 are paid on account of each pupil residing in a hostel or a boarding house attached to a recognised school.

The rules for Miscellaneous Recurring grants are retained in a simplified form from the Grants-in-aid rules previously obtaining, with the object partly of mitigating the severity of the breach with the past, particularly when the breach affects school finances, and partly to encourage the teaching of the subjects concerned. The Results grants, however, it must be confessed, constitute a survival from an essentially vicious system.

The total amount of recurring grants in any year must not exceed the difference between the total estimated income from all sources, other than recurring grants, and the total estimated recurring expenditure in the year. Sums realised by special grants, subscriptions, or donations, and placed to the credit of a reserve fund to meet capital expenditure are not reckoned as income.

Method of calculating Recurring Grants.—Applications for Recurring grants are submitted annually and are accompanied by (a) budget estimates of receipts and expenditure for the year in which grants are sought; (b) statements of actual recurring receipts and expenditure for the three years preceding the year for which grants are sought or, if the school has been established for less than three years, for the time the school has been established; and (c) a list of the staff with qualifications, general and special, in detail.

The grants are calculated on the estimates required in (a); the statements of actuals required in (b) are a guide to the Department in determining whether the estimated expenditure is likely to be incurred and the estimated income reasonable.

The statements are scrutinised by the Circle Inspector of Schools, by whom they are submitted, with a recommendation. They are then checked in the Accounts Branch of the Director's Office, and the award for each school is finally made by the Director or the Assistant Director, or by both in consultation, after an examination of the statements submitted by the management. The amount of grant payable is therefore determined, not by rule of thumb, as it was under the old dispensation, but after very careful consideration by the responsible authorities of the needs and deserts of each aided school.

Non-Recurring Grants.—The nature of the Non-recurring grants is sufficiently explained by their designation. They are grants-in-aid of capital expenditure. They are sanctioned under the usual conditions, and must not exceed (and in practice are seldom less than) half the expenditure incurred. Under the new Grants-in-aid Code the total amount sanctioned each year has been much in excess of the total sum usually sanctioned under conditions formerly obtaining.

Dissatisfaction of managing bodies .- Although the total sum sanctioned in Grants-in-aid under the new rules has been each year greater than the total sum sanctioned in any year previous to the introduction of the present Code, many managing bodies have felt aggrieved at, and have in various ways expressed their dissatisfaction with, the changes that have been made in the award of Grants-in-Aid. Some managing bodies have indeed profited by the revised method of distribution, but the majority have undoubtedly been required to shoulder a greater burden of financial responsibility than they were accustomed to bear under the old rules. thing of the kind was inevitable under any rules, unless the total sum which Government is prepared to assign to Grantsin-aid of Secondary education can keep pace with the increasing demand for educational expansion and for greater efficiency, or unless a limit be set to extensive and intensive improvement in secondary education. Managers, however, not unnaturally, do not readily see matters in this light, and at a Conference recently held in Rangoon, to consider questions relating to Anglo-Vernacular education, a proposal was put forward that Government should meet the whole difference between income and expenditure in aided schools. Conference rejected this proposal, but passed a resolution recommending that the Maintenance grant should be raised from 50 per cent. to 75 per cent. of the difference between approved expenditure and income from fees at standard rates. The recommendations of the Conference are still under consideration by Government.

University Education.

Changes consequent on the foundation of the University of Rangoon.—Until the foundation of the University of Rangoon the only grant from funds administered by the Education Department—apart from the Imperial Non-recurring grant sanctioned for the purchase of a site for the projected University and an Imperial Recurring grant of

half-a-lakh paid into the fund called the Burma University Fund—was a fixed grant payable under the ordinary rules to the American Baptist Mission College, now Judson College. The University of Rangoon Act came into force on the 1st December 1920, and the situation was entirely changed. Government still pays half-a-lakh yearly, though now from Provincial, not Imperial sources, to the University Fund, and, since no other funds are available, Government will provide and has begun to provide, funds to meet capital expenditure on University and University College buildings.

University College. —University College, formerly Government College, is no longer a Government institution, though practically its whole income, other than the income derived from tuition fees, comes from Provincial Funds, and the superior teaching staff of the College consists at present of men belonging to the Indian and Burma Educational Services, who draw their salaries in the usual way by bills on the Accountant-General. For the rest, the whole of the difference between receipts and expenditure, and also all capital expenditure, is met by Government contributions paid into the University College Fund in accordance with budget estimates drawn up by the Governing Body of the College and sanctioned by the Local Government. The University College Fund is administered by the Governing Body under rules made by itself and sanctioned by the Local Government, in accordance with the provisions of the University of Rangoon Act.

Judson College.—Government has also agreed to pay to Judson College annually for five years a fixed Maintenance grant of Rs. 62,500, being half the difference between estimated income and expenditure as approved by the University authorities. This grant is more than four times greater than the fixed grant previously paid to the Baptist College.

Building and Equipment grants will also be given to Judson College under much the same conditions as the building and equipment grants provided for in the Grants-in-aid Code.

Vernacular Education.

Need for Reforms.—The examination of conditions relating to the financing and control of Vernacular education which was undertaken in 1918 convinced Government that the whole system called for drastic reform. Teacher managers

depended on the grants determined by examination results, and such grants have long been condemned by expert educational opinion, while, in regard to the so-called half-salary grants paid to teachers who are not managers, fact was found to have little correspondence with theory. The theory, which was announced in the Burma Education Code, was that a salary grant up to a certain maximum might be paid to each certificated teacher equal in amount to the sum paid to him as salary by the manager. The fact was that the half-salary grant constituted in effect the teacher's whole salary. The manager neither did nor could pay the other half, and no inconvenient questions were asked. As for uncertificated assistant teachers, of whom there were and are a very large number, these practically lived on charity, the charity of the managers or the villagers.

As tuition fees, except in a few large urban areas, are negligible-Vernacular education in Burma, being for the most part free—the cost of maintaining Vernacular schools falls in fact almost entirely on public funds. In these circumstances the nature of the reform required was obvious, viz., the conversion as early as possible of all lay Vernacular schools under private management to Board schools controlled and financed entirely by local authorities. As this reform could not be fully realised until after the constitution of District Councils and District School Boards, Government sanctioned a transitional scheme which had been proposed for one Division of the Province, and authorised the Director to sanction schemes on similar lines for other Divisions. These schemes, which have been introduced, in whole or in part, in seven out of the nine Inspectors's Circles, all agree in the following respects:-Results grants have been entirely abolished for all schools and full salaries are paid, in the first place to the teacher manager, partly in recognition of his services as teacher-manager, and partly by way of rent for the school building he owns or occupies; in the second place, to all teachers, including uncertificated teachers employed when duly qualified teachers are not available. Lay teachers employed in a Monastic school are also eligible for full salaries from local funds, and a yearly contribution is paid Monastery. Grants may further be given for buildings and equipment.

The Rural Self-Government Act.—The Rural Self-Government Act was passed on August 26th, 1921, but has not yet come into force. Under this Act the maintenance

and control of Vernacular education, except in matters reserved to the Education Department, viz., inspection, examining and the determination of the curricula, will be transferred to District School Boards, some of the members of which will be members of the District Council appointed by the Council, and other persons co-opted by the appointed members. The control exercised by the School Boards will be subject to the provisions of rules made by the Local Government under the Act. These rules provide that schools controlled by the School Boards should be either Board Schools or Schools under private management aided by the Board (Board-aided Schools). Provision is made in the Act for the conversion of Board-aided Schools to Board Schools. The conditions for Grants-in-aid laid down in the rules are much the same as the conditions adopted in the transitory schemes just described. Full salaries will be paid to managers and teachers in lay schools, and a minimum scale of salaries will be laid down by the District School Board. Other grants will also be payable, and the grants taken together will pracucally meet the whole cost of maintaining the schools. Thus the only difference between a Board School and a Board-aided school will be that, in the latter, the school house—generally a Burmese dwelling of the usual type in which the manager and his family reside—will be owned or rented by the manager and not by the Board. The conversion of the whole class of Board-aided schools to Board schools will thus be an easy process, and when the process is completed the financing of the great majority of lay Vernacular schools will not be a question of Grants-in-aid at all. Board-aided schools will then be confined to Monastic schools or schools maintained by Christian Missionaries or by other managing agencies which maintain schools for a particular purpose or in the interest of a particular section of the community.

The District School Fund.—Grants-in-aid payable to Vernacular schools under private management will be chargeable under the Rural Self-Government Act to the District School Fund, which will vest in the District Council, and from which all expenditure whatsoever incurred by the local authorities on account of Vernacular education will be met.

Vernacular Education in Rangoon.—Vernacular education in the city of Rangoon is at present controlled by a School Board which is financed by the Municipal Committee. The School Board has adopted the transitional scheme already described. In the near future the powers of the School Boards

are likely to be transferred to a Committee of the Corporation, called the Education Committee, and composed partly of members of the Corporation appointed by it, and partly of persons co-opted by the other members. The conditions of Grants-in-aid will probably be very similar to those laid down in the rules made by Government under the Rural Self-Government Act; in other words they will be much the same as those now in force.

CHAPTER VIII.

Grant-in-aid System, Bihar and Orissa.

The grant-in-aid system of Bihar and Orissa is a two-fold one. Some aided institutions receive grants directly from provincial revenues, while others receive them from local bodies. In the latter case much of the money comes ultimately from provincial revenues in the form of a lump grant to the local body concerned, and in both cases the money paid from provincial revenues is derived in part from the educational grants given from time to time by the Imperial Government. The above observations apply both to recurring and to non-recurring grants.

I. Recurring grants paid directly from provincial revenues.

When the province of Bihar and Orissa was constituted on the 1st of April, 1912, the grant-in-aid system in force in the old province of Bengal continued to be followed for a short time. Under this system grants were limited in amount to a proportion of the income guaranteed from private sources. For colleges the rule was that grants-in-aid should not exceed the sum to be expended from private sources excluding the fees paid by the scholars, but as in college cases a reference to Government had always to be made before a grant was given, and Government retained the power of relaxing the rules, the proportionate limit was not of much consequence. That the rules for schools were not framed to meet the circumstances of the new province may be inferred from the fact that all the divisions constituting Bihar and Orissa were specified as exceptions to the general rule that the grant to a high school might not exceed one-half, nor the grant to a middle school two-thirds, of the income guaranteed from private sources. Since these divisions were treated as exceptions, the grant to a high school might be equal to twothirds of the income guaranteed from private sources, while for middle and primary schools the grant might be equal to the income so guaranteed.

2. The question whether the old rules were sufficiently liberal and otherwise suitable came up for consideration in connection with the Imperial grants given for primary and secondary education in the year 1912-13 and a revision was then undertaken on the basis of the rules which had recently been framed for Eastern Bengal and Assam.

- 3. No attempt was now made to define the proportion of the cost of aided colleges which might be met from public revenues. The grant to St. Columba's College had for some time been Rs. 1,000 a month and those to the other colleges were gradually raised to the same figure, the chief condition laid down being that the staff should be paid at rates not less than certain specified scales, namely Rs. 400—30—700 for the Principal, Rs. 150—10—250 for the professors and Rs. 100—10—150 for the lecturers. These salaries were a considerable improvement on those previously given and have tended to make the staffs more permanent, but the annual rise in the cost of maintaining the colleges, due partly to the increments prescribed and partly to increases in the staff in order to provide for efficient teaching, is already causing anxiety to the Governing Bodies.
- 4. For secondary schools also it was decided to drop the principle of limiting the grant to a proportion of the total cost and to substitute one under which, if the necessity for a school were established and Government had sufficient funds, it would be assisted to maintain a prescribed scale of establishment. The different scales laid down are as follows:—

High Schools.

•		,		ı				$\mathbf{Rs.}$
							:	a month.
Headmaster .		•	•	•		•		100
Assistant Headmas	ter		·		•	•	•	75
Third Master .					•		•	60
Fourth Master .					•	•		4 0
Fifth Master .		•						4 0
Sixth Master .					•			40
Seventh Master .		•						35
Additional Master				•	•			40
Persian Teacher .				. '		•		30
First Vernacular M	[aste	r			-			25
Second Vernacular	Mas	ter						20
Contingencies, inclu	iding	g lib:	rary,	prize	es, e	tc.	. •	30
					Тота	L		535

Note 1.—One of the posts of masters mentioned above is intended for the Head Pandit.

NOTE 2.—In schools where the number of pupils is less than 150 the additional master on Rs. 40 is omitted, and the allowance for contingencies is reduced to Rs. 20.

Note 3.—For every additional vernacular taught as a medium of instruction two more teachers on Rs. 25 and Rs. 20, respectively, are required. Where an extra vernacular is taught as literature only, one more teacher suffices.

Note 4.—Where a class is duplicated owing to numbers, the additional teachers employed must be paid not less than Rs. 35 if teachers of English, or Rs. 20 if vernacular teachers.

Middle English Schools.

								$\mathbf{R}\mathbf{s}$
							a	month.
Headmaster						•		50
Assistant Master		•				•	•	35
First Vernacular	Τ	eacher						${\bf 25}$
Second Vernacula	r	Teacher	٠.	•				20
Third Vernacular	I	'eacher				•		15
Contingencies	٠		•					15
8				•	·		,	· —
					\mathbf{T}_0	TAL		160

Note 1.—For every additional vernacular taught as a medium of instruction two more teachers on Rs. 25 and Rs. 15, respectively, are required. Where an extra vernacular is taught as literature only, one more teacher suffices.

NOTE 2.—When a class is duplicated owing to numbers, the additional teachers employed must be paid not less than Rs. 25 if teachers of English, or Rs. 15 if vernacular teachers.

Middle Vernacular Schools.

								Rs.
							a	month.
Headmaster Second Master				•	•			25
		•		•	•	•	•	15
Third Master	•	4	•	•	•	•	•	15
Fourth Master				•		• .	•	10
Contingencies	•				•	•	•	5
		,			To	TAL	•	70
								_

The number of High Schools at present aided is 59 and the monthly grant given is Rs. 9,337 making the average grant Rs. 158.2 while for Middle English Schools the figures are 203 and Rs. 15,760 making the average grant Rs. 77.6. It may be noted that the scales proposed had been under consideration in Bengal and Eastern Bengal and Assam for some years. They represent a considerable improvement on the salaries previously paid, but with the general increase in prices and salaries it is doubtful how long they will continue to be adequate.

5. In 1912 some Middle English Schools were aided directly from provincial revenues and others by local bodies. This system or lack of system was found to be unsatisfactory and a tendency was noticed for local bodies to divert to Middle English Schools sums which were more urgently required for primary education. Accordingly in the year 1918 the financing of all the Middle English Schools was taken over by the department, while the control of the few Middle

Vernacular Schools formerly aided by Government was gradually handed over to local bodies. Middle Vernacular Schools are now treated in the same way as primary schools.

- 6. The new rules for grants to secondary schools have been distinctly beneficial to small schools which could not previously afford to pay their staffs at the same rate as large schools owing to the smaller income collected from fees. The larger schools need less help from Government and have benefited less, but no grant of less than Rs. 75 a month is given to a High School, or of less than Rs. 30 a month to a Middle English School and these sums have in some cases enabled the teachers, to draw pay at rates slightly in excess of the standard referred to above.
- 7. In 1912 a certain number of primary schools, especially in Municipalities, received small grants directly from provincial revenues, but it was decided that this system should be discontinued and in the year 1913 grants were first made to all the Municipalities in the province to assist them in maintaining or aiding primary schools. The remaining schools of this status which had previously received grants directly from Government were at the same time handed over to the local bodies concerned together with the necessary funds.
- 8. In addition to grants to high and middle schools, grants are also given to a number of special institutions such as training classes and technical schools. No special rules are laid down for the assessment of these grants, the sum to be given being determined after consideration of all the circumstances of the case.
- 9. The power of sanctioning recurring grants to colleges rests with the Director, but the approval of Government has to be obtained to the necessary budget provision. Formal sanction to recurring grants to schools is given by the Inspector or Inspectress, an allotment for the purpose being placed annually by the Director at the disposal of each such officer. The procedure followed is for the Director when framing his budget for any year to consider the grants given during the previous year and the additional sum, if any, likely to be required and to make provision accordingly. This provision may or may not be modified by Government before the budget is passed. When the amount finally sanctioned is known a conference of the Inspectors and Inspectresses is held, the needs of the schools already aided are discussed, and the claims of different schools to the surplus available, if any,

are considered. After these have been decided the Director places a lump sum at the disposal of each Inspector and Inspectors and these officers make allotments to individual schools.

II. Grants to local bodies for educational purposes.

As already mentioned, until the year 1913 no grants were made to Municipalities. Grants were given to the District Boards in the seventeen districts in which the Bengal Local Self-Government Act had been introduced and to the District Council of Sambalpur, while in the three remaining districts lump grants were placed at the disposal of the Deputy Commissioners. The grants to the District Boards originated at the time when the Boards were constituted. Certain charges and certain sources of revenues were transferred and Government gave a grant equal to the difference, the sources of revenue transferred being in no case sufficient to meet the expenditure. From time to time further educational grants were given to meet specified objects of expenditure and the portions of the Imperial grants of 1902 and 1905 set aside for primary education in Board areas were also handed over to the Boards. In the remaining districts the grants appear to have been assessed on no fixed principle, the local officers stating their needs and such money being given as was available.

2. The system cutlined above was reviewed when the Darbar grant for primary education came to be distributed. The grants given in 1911-12 to the different districts were then accepted as a basis and additions were made to them in the year 1912, and have been made on many occasions since, for certain specified purposes. In 1912 grants were given to enable the Boards to carry out a general revision of the stipends of teachers in primary schools, it being laid down that in future no trained guru should receive a stipend of less than Rs. 7, no teacher with middle qualifications a stipend of less than Rs. 6, no teacher with Upper Primary qualifications a stipend of less than Rs. 3 nor any teacher less than Rs. 2, while in girls' schools the minimum for a trained teacher was to be Rs. 12 and for other teachers Rs. 9. the following year the minimum for a trained teacher in a boys' school was raised to Rs. 9 and grants have from time to time been given to enable more schools to be financed, for the maintenance of Board schools or schools in connection with

factories, and for the support of schools formerly financed directly by Government.

- 3. During the first year of the province certain sums were handed over to the local bodies to enable them to give larger grants to Middle English Schools, but, as already mentioned, it was decided in the year 1918 that Government should assume the entire responsibility for these schools. This resulted in a considerable additional expenditure to Government, for the grants to the Boards were not reduced, but Government undertook the whole of the expenditure involved, leaving the Boards free to devote to other educational purposes the sums which they had formerly spent on Middle English Schools.
- 4. The effect of the system described above has not been entirely satisfactory, for in 1912 the number of schools helped by the Boards in some districts was much greater than in others, and, to enable the minimum rates of stipend to be paid in all districts alike, the districts with most schools, particularly the coast districts of Orissa, required and received much larger grants than many more backward areas. remedy this the Boards have been required to frame programmes for the expansion of education in their districts and these have been examined so that the relative needs of each area may be compared and it may be ascertained how far the Boards are doing their own duty and how far they need further assistance from Government. The reorganisation of the provincial finances due to the Reforms Scheme has prevented much progress from being made with the carrying out of these programmes except in cases where the Boards have been able to provide funds from their own resources.
- 5. Mention has been made above of the introduction of a system of giving grants to Municipalities for the schools under their control. These bodies, too, have been asked to prepare schemes for the improvement of education within their boundaries and both capital and non-recurring grants have been sanctioned to enable some of these to be carried into effect. The capital grant admissible is limited to twenty per cent. of the ordinary income of the Municipality and the recurring grant to three per cent., and such grants are only given if the Municipality will find from its own resources a recurring sum of at least three per cent. of its ordinary income and a non-recurring sum equal to half the capital grant for which it applies.

6. The allotments given to local bodies from provincial revenues are spent in different ways. In some cases the schools are directly maintained by the District Board or Municipality, the teachers being District Board or Municipal servants, and in other cases a grant is given to a committee managing a school, but in the majority of primary schools assistance is given in the form of stipends to the teachers. The latter arrangement is not, however, satisfactory, for the teachers of primary schools tend to work indifferently in the absence of local control and stipendiary schools often come to a sudden end owing to the illness or death of the teacher, or merely because he decides to give up work or moves to another village. Endeavours are therefore being made by the Boards to extend the system of aided primary schools as far as possible, but the matter is not without difficulty, for it is not always possible to find in rural areas persons willing to serve on school committees.

III. Non-recurring grants.

Non-recurring grants are given both from provincial revenues and from local funds, and the rules generally are the same except that in the latter case a maximum of Rs. 10,000 is laid down as the greatest sum ordinarily admissible for any one project. The rules for colleges and for schools are practically identical. Before a grant is given from provincial revenues the project must be approved by the Commissioner of the Division and (in the case of a school) by the District Officer. A trust deed must be executed. Where the amount is small a simple undertaking by the Committee to comply with the grant-in-aid rules is usually accepted, but in other cases a mortgage is required and where the committee is unable to execute a mortgage the usual procedure is for Government to acquire the site on which the building is to be erected and to lease it to the committee for a nominal rent on certain specified terms. These terms are that the building shall be used only for educational purposes, that it shall be maintained in good repair and shall yield no pecuniary return to the School Authority save for the purposes of the school, and that the school shall be open to inspection by Government Officers and shall continue to be well managed. In the event of a breach of any of these conditions Government reserve the right either to have the defect remedied or in the last resort to resume the land (where it belongs to them) and to recoup themselves for the grant of money paid.

- 2. Grants are given for the acquisition of land for play-grounds as well as for buildings. In the former case the land is acquired by Government and leased to the committee on a nominal rent. In the latter the plans must receive the previous approval both of the Education Department and of the Public Works Department, the function of the latter, in the case of a school applying for a grant from a District Board, being discharged by the District Engineer. The Public Works Department or District Engineer, as the case may be, supervises the work of construction. Half of the grant is paid as soon as sanction is given, a quarter when the work is half done and the balance on completion, a certificate being required in either case from the supervising engineer that the work is being carried on satisfactorily or has been completed.
- 3. Grants are also given for furniture, apparatus, chemicals, maps, books for libraries and equipment generally. In the case of a college the grant may not ordinarily exceed half of the cost and in the case of a school two-thirds.
- 4. Non-recurring grants from provincial revenues are ordinarily sanctioned by the Director. Amounts not exceeding Rs. 500 may, however, be sanctioned by the Inspector or Inspectress, while the sanction of Government is required if the amount applied for exceeds Rs. 10,000 or two-thirds of the total cost of the project, if the ordinary grant-in-aid conditions are not to be applied or if the budget provision is inadequate.

CHAPTER IX.

Grant-in-aid System, Central Provinces and Berar.

Central Provinces from 1893 to 1904.—The Educational Manual of the Central Provinces, dated 1893, applied only to the Central Provinces, as Berar had not then been amalgamated with that Province.

Recurring grants.

Fixed grants.—Recurring grants were given on one of three systems. The first was called the Fixed Grant System and was intended mainly for schools above the Primary grade. The amount of the grant was limited to the difference between income and expenditure. It was intended that grants from Provincial funds should be devoted to the education of girls and of the backward classes, and for the maintenance of Science, Art, Industrial and High Schools. Other institutions would ordinarily draw grant from local funds. The minimum average daily attendance was fixed at 20 for boys' and 10 for girls' schools, and the other educational conditions were much the same as at present.

Result grants.—The second system, by which grants were assessed on attendance and on instruction, was called the Result Grant System. These grants were given only to Vernacular schools up to the fifth standard. They might be paid from Provincial or Local Funds.

Based on Attendance.—For each pupil in average attendance below 18 years of age a grant of 8 annas a head was given, but a pupil teacher had to be maintained for every 20 boys over the first fifty of average attendance. This would provide from the attendance grant a maximum of Rs. 25 per annum for a teacher.

Based on Instruction.—A grant for instruction based on passes in the annual examination made it possible to maintain the school. If the school had been open for 180 boys in the year, a pupil who had put in 90 attendances might earn for the school for each subject in which he passed sums varying from eight annas in Standard I to Rs. 2-8-0 in Standard V, and rising to Rs. 3 for passing in Surveying (an optional subject) in the 5th class. For girls the grant was generally double, and for certain depressed classes 50 per cent. above

the standard rate. Only the three R's were compulsory. A list of 12 optional subjects, including Hygiene and Agriculture, shows the optimism of the authors of the scheme.

Night Schools.—Night schools were also aided under this system. Only 80 attendances of $1\frac{1}{2}$ hours were required, but to ensure some instruction an age limit was fixed, and in the first standard no grant was allowed for a student who did not pass in the three R's.

As the total amount required to pay the result grants varied each year a maximum was fixed for each District or Municipality, and a proportionate reduction made if the total demand exceeded the sum available. It is curious that the grants were paid to the School Managers through the District Superintendent of Police.

The Combined System.—The third system was the Combined Grant System and included a fixed monthly salary for the teacher and a bonus on the results of the examination. This like the Result Grant was applied to Vernacular Schools only.

Fixed grant.—The maximum fixed grant was Rs. 6 per mensem for a certificated master and Rs. 4 for an uncertificated teacher. In addition a grant assessed on the results of the Annual Examination was paid at half the rate fixed for the Result Grants.

Bonus on Instruction.—Of this bonus on passes 40 per cent. was allotted to the Head Master and 10 per cent. to the subordinate staff. The grants were paid to the Managers of the School through the District Superintendent of Police.

Changes in 1900.—In 1900 a variation on the Result Grant and Combined Grant Systems was introduced. The main features were a differentiation of curriculum between town and village schools, with rates slightly higher for the village than for the town, and that no pupil could earn any grant unless he passed in 2 out of the 3 compulsory subjects, nor any grant for an optional subject unless he passed in all compulsory subjects. The valuation of the subjects is interesting. A pass in Standard 5 in Reading secured 12 annas, in Arithmetic Rs. 2-8-0, in a town school. In a village school the fourth class was the highest, and in that class a pass in Arithmetic was valued at Re. 1-12-0, in the corresponding class of a town school at Re. 1-8-0. Unfortunately no figures are now available to show the average income of teachers.

Comparison of teachers' incomes with those of 1920.—The fixed grant of Rs. 6 per mensem allowed to certificated teachers under the combined system in 1893 would be equal to not less than Rs. 15 to Rs. 18 to-day, and in addition strenuous tuition carefully adapted to take advantage of the Code must have placed him in a position of comfort. The uncertificated teachers on Rs. 4 with a statutory share of the result grant (raised in 1900 to 15 per cent.) were probably no worse off than the similar class to-day.

Non-recurring grants.

Towards the cost of buildings, grants were given equal to one-third of the expenditure, and for furniture and apparatus equal to one-half of the cost.

Berar from 1893 up to 1904.—An educational manual of Berar also dated 1893, before that tract was amalgamated with the Central Provinces, still survives. The conditions of grant to local bodies under that Code are curious. Money raised from Municipal and town funds and spent on education might be counted as a qualification for grant, but educational cess compulsorily recovered is not eligible for Government The maximum amount of grant was fixed at a sum equal to the amount expended from private sources on secular instruction, except in the case of Indigenous Schools. Government will not in any matter interfere with the actual management of a school thus aided: but will seek, upon the frequent reports of its Inspectors, to judge whether a good secular education is imparted or not." "No preference will be given to any school on the ground that any particular religious doctrines are taught or are not taught therein." Some fee, however small, was required from the scholars.

Indigenous Schools.—For indigenous schools there was a capitation grant of eight annas a head for every boy or girl, based on average daily attendance throughout the year. In addition any boy passing the annual examination might earn for the school from Rs. 3 in Standard I to Rs. 8 in Standard VI, and girls who passed earned twice this amount, as well as an extra grant of Rs. 2 for creditable needlework. In those days a well managed school must have been a profitable venture. The rewards for passes were much greater than in the Central Provinces.

Even a newly opened school might get a grant of Rs. 15 to Rs. 60 at the rate of Re. 1 per head of average attendance,

or Re. 1-8-0 for backward classes, and for girls Rs. 2. Later on the School would be transferred to the Result Grant System noted above. The attendance roll was certified by the Patel and Pandit.

When Berar was joined to the Central Provinces, the grant system of the latter was applied, and in 1907 the Commissioner, Berar, wrote in forwarding the annual report "A system of grant-in-aid which practically wipes out 400 schools in 5 years is, I respectfully submit, in itself evidence of its being a wrong system."

Payment by Results.—In the calm atmosphere of educational study there is little to be said for the system of payment by results. The cramming of the students and the personal idiosyncracies of the examiner have combined to condemn it, but it is eminently suited to the early stages of Primary Education, when the public is unable to judge of the work of a teacher. The direct financial incentive to the teacher has now been removed, and rarely has educational enthusiasm been able to apply an equal stimulus. If in addition to a standard wage it were possible for each teacher to secure a moderate bonus by successful work as well as the chance of distant promotion, Vernacular schools would show far better results. Inspection remarks would not be repeated for years and neglected for ever. There is too little reward for the eager, and too much security for the lazy.

Vernacular education under public management has finally supplanted aided Vernacular schools as the main system of the Province. Nor would compulsory education be possible otherwise. But there is room for a bonus by results in addition to a standard pay as a corrective to the lethargy of the educational machine.

Central Provinces and Berar from 1904.—With the Manual of 1904 a universal system of fixed grants supplanted payment by results. Grants were offered to all educational institutions under private management which gave a sound secular education.

1904. Payment by results abolished.—The ultimate object was stated to be to enable the Local Administration and Local Bodies to withdraw gradually from the direct management of schools, maintaining only a few model institutions.

The usual educational conditions were laid down, with the exception of the observance of the Risley Circular. The amount of the grant was not to exceed the difference between income and expenditure, but no proportion was fixed between grant and expenditure, nor was it based on attendance except that a minimum attendance of twenty boys, or in Circle schools of ten girls, was required. Only in the case of non-recurring grants was a limit fixed, one-third of the expenditure.

Grants were intended to encourage schools for girls, backward races, departments above the lower secondary (middle schools) and science, art and industrial schools. Vernacular schools were to be maintained or aided by local bodies. In practice, however, all kinds of schools were aided if they were likely to meet a local need. As regards finance, the departmental officers and managers played a game of pull devil pull baker, with the Director as Umpire to decide on the amount of the grant-managers requiring all new expenditure to be met from grant, and departmental officers urging managers to increase their resources. The absence of any statutory limit to grants probably suited the times when education was still in its infancy in this Province.

1911. Grant in proportion to expenditure.—About 1911 more detailed terms for grants were fixed, imported mainly from Bombay. All types of schools under private management and secondary schools managed by local bodies were brought under one rule. Educational conditions remained nearly the same, but the maximum grant was fixed at half the income, or one-third of expenditure, whichever is less. In the case of Primary Schools carried on under exceptional circumstances an additional grant equal to about one-ninth of the expenditure could be given. Industrial, Normal and Art schools were expressly excluded, and no limit was fixed for them, but as such schools were almost always managed departmentally this provision had little effect.

Vernacular Girls' Schools.—The history of grants to girls' schools is more intricate. From early days the large majority of girls' schools in this Province has been under Departmental management. Grants were offered to assist managers to test over a period of two or three years whether the number of girls likely to attend would justify founding a permanent school. In 1910 grant was fixed on attendance.

plus six rupees for every five girls in addition. As the first classes of these schools were found to be convenient creches, no grant was given for attendance in that class. In 1911 in place of a grant based on attendance, half the expenditure was offered on condition that a certain number of girls were enrolled in the higher classes. But as these girls would be nearer marriageable age, the school was required to meet in a separate building, and the permission to meet in the boys' school after school hours was withdrawn.

The most interesting feature of this grant code for girls was the purchase of pupils in the open market. Head Masters of boys' schools were given rewards for securing the attendance of girls in boys' schools: later on the rewards depended partly on the number of girls who passed the class examinations. In parts of the Province this system was astonishingly successful, particularly in the East. The natural educational ambition of the school master, stimulated to action by the hope of reward, produced scores of pedagogic missionaries, who secured the attendance of many thousands of girls of tender age, and continued the attendance of a few of marriageable age. Moreover a considerable enrolment of girls would mitigate the pressure of the revenue official whose influence maintained attendance, and so leave more boys for the labour of the fields.

1917. Present system of grants.—The present code was brought into force in 1917, and differs very little from that of 1911, except that an estimate is made of the requirements of each school for five years, and the grant is generally fixed on those figures. The maximum is as before, save that schools in special difficulties may receive half their expenditure. Colleges. Normal, Art and Industrial schools are exempt from any limit. Attendance does not enter directly into the calculation of grant, but is considered with other factors. The institution must meet a want, pass a sanitary standard, give physical training, keep regular registers and accounts, have a satisfactory managing committee, be open to inspection, follow an approved curriculum, use only approved books, have a satisfactory staff, charge certain fees if required, and observe the rules governing the relations of schools to politics. The conditions and limit of grant are the same for Secondary and Primary schools for boys and girls but the special arrangements referred to above for girls' Vernacular schools maintained temporarily by local effort with a view to ultimate

provincialisation are continued. For such schools the conditions of grant are designed to maintain the school for two or three years. Half the total expenditure is given provided that suitable accommodation and staff are provided, that the total average attendance is not less than 20, and that there are girls reading in the second class. Ordinarily the school would be taken over by the Department after probation. If the managers desired to retain it they would be aided under the same rules as boys' schools, under which they might continue to receive a grant equal to half their expenditure.

European Schools.—Until 1912 European schools were inspected by an officer of the Bombay Presidency, and received aid on their system, based primarily on attendance, with many supplementary grants for trained teachers, special subjects, etc., needing an expert to take full advantage of them. When they came under the control of this Province an estimate was made of the probable attendance, number of classes, staff, salaries and other requirements. A recurring grant equal to half the expenditure was given subject to certain limits, and that system has remained in force from 1914 till now. All European schools of all grades, for boys and for girls, are treated alike under a separate code of regulations.

The effect of the grants.

For the past 20 years the supply of vernacular education for boys has been regarded as the duty and privilege of local bodies assisted by grants. Where private schools existed they were aided sometimes by Government grants, sometimes by local bodies, and occasionally by both. As the schools under public management spread and parents became accustomed to the nominal fee of one anna a month, they became unwilling to pay the higher fee required by the manager of a private school. He desired the greater security and higher remuneration obtainable under local bodies, and the private venture school practically disappeared. Religious bodies such Missionaries, Anjuman and Sabhas maintained Vernacular schools, but the tendency is for the last two bodies to hand them over to local bodies. The fees in primary schools are so small that the managers must ordinarily supply two-thirds of the expenditure, and this has more than doubled in the last ten years.

In secondary schools this tendency is less marked. The actual cost to be provided by the management is larger than

in the case of primary schools, but there is more credit in maintaining a secondary school, and the richer classes wish to keep their sons near home till the age of 14 or 15. Fees and grants may be relied on to meet two-thirds of the expenditure in an established secondary school, and the lower the pay of the staff the less money must be found by the management. Two tendencies are marked—the first to reduce cost by maintaining a cheap staff, the second to raise fees slightly above the minimum.

The High School classes (X to XII) are nearly paid for from grant and fees, but the Educational Department has supplied these classes more liberally than Middle Schools in proportion to the demand. It is more difficult for a private school to find the staff for these higher classes that departmental and University standards require. Since the 1911 code a large number of lower secondary schools have been opened, the most important section being those managed by In the richer districts of the Province a conlocal bodies. siderable number have been opened by managing committees, but they would for the most part gladly hand over their schools to local bodies if the latter had the funds to maintain The code encouraged the opening of these schools, and the schools encouraged cheap labour. Some of the labourers in these vineyards still receive only a rupee a day. Nor can this be remedied unless the grant provide almost the whole of the difference between fees and expenditure, at a cost equal to placing the schools under public management. There is not yet in this Province a body of educationalists who can manage private institutions on new lines and provide a testing ground for new ideas. A grant equal to half the expenditure would slightly ameliorate the conditions in aided secondary schools if the managers were obliged to provide at least one-tenth of the expenditure.

The system has failed to assist primary schools to survive except those managed by religious institutions. It has encouraged the attendance of girls in boys' schools, the opening of experimental girls' schools, and the maintenance of secondary schools by religious societies, other private persons, and by local bodies. But it is not liberal enough to make the conditions of service in secondary schools satisfactory.

Non-recurring grants.

In the Code of 1904 one-third of the cost of buildings and one-half of the cost of equipment was promised, the grant

being paid at such time, after completion, as funds were available. The plan of a building and estimate of cost had to be approved by the Education authorities with the aid of the Public Works Department and lists of equipment were recommended by the Inspector.

In the Code of 1911 the proportions remained the same but no grant of less than Rs. 100 for buildings was given, and none at all towards repairs. For equipment no grant of less than Rs. 50 was given. The terms of the 1917 Code are the same, but the power of sanctioning and paying grants has been deputed to the Director up to Rs. 5,000 for buildings, and Rs. 1,000 for equipment.

The conditions of the grants have remained practically unchanged since 1904. In the case of buildings the ownership of the site has to be proved, and trust deed executed, of which a copy is attached. Arrangements have been made by which local bodies can draw in advance grants sanctioned in respect of secondary school buildings, subject to adjustment on completion of the work. Grants for Vernacular school buildings are not paid to such bodies under the Grant-in-Aid rules but lump grants are sanctioned subject to conditions that vary from time to time.

Grants towards equipment until 1911 were recoverable in part if the school ceased within five years. No such clause is now required. Cases of recovery of a building grant are so far unknown, and of equipment grant extremely rare. Ordinarily the equipment would be handed over by the managers to another school with the permission of the Department.

Even with a reduced scale of requirements for school buildings and equipment, the capital cost is a heavy burden for local bodies, and still heavier for private schools. This also will tend to cause managers of private institutions to hand over their schools to local bodies whose resources are larger and who receive for secondary schools grants on the same scale as managers of private schools. It seems possible that the requirements in the way of buildings, furniture and equipment may have to be reduced in the future.

Grants to local bodies for educational purposes.

As has been mentioned in the preceding section, these bodies receive grants in respect of secondary schools under the same code as schools under private management. Grants for vernacular education have still to be considered.

Grants to Municipalities for vernacular education.

Prior to 1917 there was no recognised system of distribution, except in Berar, where Municipalities received one-third of their expenditure on education under all heads. At various times district officers in the Central Provinces considered what each Municipality could spend on schools. This was generally, but not always, supposed to be at least five per cent. of its income. The balance they hoped to secure in grants. When fresh expenditure had to be incurred, the finances were examined and an additional grant asked for. Naturally a Municipality which was providing for a water supply could afford less for schools, and would probably secure more in grant for education by following the tactics of the importunate widow.

The system adopted in 1917 for the Central Provinces and subsequently for Berar was as follows. That part of Municipal income, such as water rate, sanitation rate, etc., which is supposed to meet only the cost of the service, was excluded. One anna in each rupee of the rest of the income was then regarded as set apart for vernacular education. If the cost of vernacular education exceeded that sum, then the excess was met half by the Municipality, and half by grant from Government. Whether the system will meet the requirements of Municipalities under the Compulsory Education Act is now being considered. Possibly more liberal terms may be given to those bodies which adopt the provisions of the Act.

(In calculating the recurring cost of Vernacular schools under the above system only salaries and pension contribution are taken into account.)

Grants to District Councils (District Boards) for vernacular education.

Prior to 1915 there was no recognised system for the award of grants to District Councils (or District Boards as they are called in Berar). The following system was tentatively approved by Government in 1915.

In the distribution of recurring grants the improvement of existing schools was not to be subordinated to the extension of Vernacular Education. All Local Bodies would estimate the expenditure required for bringing their existing schools up to the required standard in regard both to pay and number of teachers. From the funds available at any time for grants to District Councils for Vernacular Education a portion not exceeding 50 per cent. was to be reserved for distribution through Commissioners to District Councils in proportion to the total estimate for the Division of the expense of bringing schools up to the required standard as estimated by District Councils. It was assumed that the proportion reserved for grants towards improvement of schools would gradually decrease and a larger share would gradually be set free for extension. It was also assumed that schools opened from 1916 onwards would be adequately staffed by properly paid teachers and consequently that no special allotment need be reserved for further improvement of such schools.

The balance available at any time from Provincial grants for the extension of Vernacular Education after deduction of a sum reserved for improvement of existing schools was to be distributed to Commissioners in proportion to the total number of boys of school-going age in each Division for whom no school provision had so far been made.

The distribution of grants both for improvement and extension in accordance with the principles recorded above was to be by Divisions. In distributing the amount allotted for the Division among the District Councils included in the Division the Commissioner was supposed to take into consideration not only the relative needs of each Council as indicated by the estimate of expenditure required for improvement and by the total number of unprovided boys but also the special needs and circumstances, financial and otherwise, of each District Council.

In the distribution of grants for capital expenditure the needs of existing schools were to receive prior consideration. Grants were to be allotted to divisions in proportion to the total requirements of each division as estimated with reference to the total number of pupils for whom suitable accommodation was provided in existing schools.

In two important respects the situation has changed since the principles referred to above were established in 1915:—

(a) The question of teachers' pay has become far more prominent owing to the abnormal rise of prices and other causes. The gradual increase contemplated when not more than half of the funds available at any time was set apart in 1915 for improvement of salaries and the schools generally, has now been

found totally inadequate. Moreover, the salaries of posts created since 1916 in connection with new schools have not, as anticipated, been found adequate and further expenditure on these schools as well as on schools opened before 1916 is necessary.

(b) Since 1916 District Boards in Berar have taken advantage of facilities afforded for increasing their educational cess and for levying a special school rate in certain areas and on certain conditions. while the Central Provinces Local Self-Government Act of 1920 when put into force will give similar facilities to District Councils in the Central Provinces. It was assumed in 1916 that for some years to come District Councils generally would not be able to add substantially to their own funds for Vernacular Education. Consequently the question of encouraging Local Bodies to increase their own funds by making grants proportionate to the proceeds of local taxation was not seriously dis-The possibility of such a course as a corollary for future legislation was, however, noted.

Another factor that has now become important was left out of account in 1915. It was assumed that there was in all the districts of the Province a demand for more Vernacular schools and that this demand did not vary sufficiently from district to district to justify differential treatment in regard to distribution of grants. Since 1915 it has been suggested that in many parts of the Province there is no further room for extension on a voluntary basis. District Councils have been authorised by legislation to introduce compulsory education, and the question of the extent to which a local demand for extension either on a voluntary or compulsory basis should influence the distribution of grants becomes prominent.

The principles of distribution are consequently under revision and the following factors are being taken into account:—

- (a) The existing and potential financial resources of District Councils.
- (b) The present state of Vernacular Education under each Council both as regards quantity and quality.
- (c) The local demand for Vernacular Education whether on a voluntary or compulsory basis.

It has been suggested that though Government has delegated to Local Bodies responsibility for the maintenance of Vernacular schools, it is ultimately responsible for determining within the limits of the Province the minimum expenditure on Vernacular Education and for seeing that in regard both to quantity and quality it does not fall below a certain level. It is also responsible for deciding what portion of this minimum expenditure can be met from local funds and what portion will consequently fall to provincial funds. once provided for this minimum expenditure, Government ought to encourage Local Bodies to undertake further expenditure from their own funds for the development of Vernacular Education beyond the established minimum, and such further expenditure can be encouraged by contributions from Government proportionate to the additional expenditure undertaken by Local Bodies. According to this principle contributions from Government to enable Vernacular Education within a given area to reach the required minimum. should be with reference to the needs and resources of the locality as determined by Government. Contributions from Government for any advance beyond this minimum should be proportionate to the contributions from Local Bodies. a certain level Government will give to those who need and beyond that level it will give to those who are prepared to spend. The minimum standard and expenditure required can obviously be determined by Government only for a definite The whole situation must be reviewed periodically, and in the ordinary circumstances the minimum standard would be raised as a result of each successive review. be necessary to deal individually with each District Council and to give up divisional distribution with discretionary powers to Commissioners in the allotment of Divisional amount to District Councils.

These principles are now under the consideration of Government.

CHAPTER X.

Grant-in-aid System, Assam.

Section A.—Recurring grants.

Historical summary.—It is convenient to consider the period from the year 1912 onwards. In 1912 the province was constituted in its present form, and the present system of grant-in-aid, in so far as it represents change in policy or procedure, has been evolved since 1912 on the basis of the old Assam system and the modifications introduced during the years when Assam was part of the province of Eastern Bengal and Assam. In 1912, grants-in-aid were governed by a code of general rules formulated by the Government of Eastern Bengal and Assam, and, in so far as the treatment of Assam districts differed from that of Eastern Bengal districts, by the rules of the Assam School Manual. Changes in both these groups of rules have to be recorded.

- 2. Changes in procedure.—Section IV of the Eastern Bengal and Assam Code of rules deals with recurring grants. The changes which have been made since 1912 under this section are to be explained, not so much by reason of difficulties met with in administering the rules, as arising from the desire to have a more instructive set of rules and a clear system of determining the grants payable and the standards to be imposed. A comparison with the present Assam Grantin-Aid Code will shew that the main changes consist in the addition of directions as to the staff to be maintained in aided schools, of a uniform method of estimating the proportion of the cost to be borne by public and private funds respectively and the setting aside of a proportion of the receipts to form a school fund, a section referring to special grants and general revision with a view to clear definition and omission of nonessential details.
- 3. The other group of rules referred to as existing in 1912, viz., those contained in the Assam School Manual, provided for grants-in-aid to primary and middle schools, in the form of capitation allowances. This system has since been abandoned, after careful consideration, both on theoretical and on practical grounds, and the existing system is one of fixed grants subject to periodical revision.

- 4. Present system of grants: Secondary schools.—Secondary schools comprise high and middle Anglo-Vernacular schools and middle Vernacular schools. With the latter, the grant-in-aid system is not concerned now. It has been accepted—and this marks a change in policy from the system in force in 1912, which provided for grants-in-aid to Vernacular schools by local bodies as well as by Government—that vernacular education in all its stages is the direct charge of local bodies, i.e., Vernacular schools are managed directly by local bodies. The only exceptions to this rule are schools in hill districts or special localities, and these come under a special section of the Grant-in-Aid Code, as will appear later. The rules applicable to grants made to secondary schools are contained in the new code already referred to.
- 5. The general conditions under which grants are made, are stated in a separate section, and call for no special remarks. It may be noted that aided high and middle Anglo-Vernacular schools are expected ordinarily to confine themselves to the English-teaching classes, in conformity with the principle of free vernacular education in the province.
- 6. The assessment of grants, as explained in the rules and by the form under which grants are sanctioned, is with reference to a scale indicating the amount which the public is expected to contribute by fees or otherwise per head of the enrolment. This represents a change from previous systems, under which Government, when it undertook to aid a school, was called upon to provide the difference between the cost of up-keep and a fluctuating income which depended partly on fee-receipts and partly on subscriptions which were irregularly paid and sometimes existed only on paper.
- 7. So far as possible, uniform scales of establishment are prescribed now for aided secondary schools, and the grants are made to depend on these scales and the capitation assessment. Ordinarily the capitation will not vary as between schools of the same standard, but the managers of schools may levy fees at rates in excess or defect of the capitation scale.
- 8. A typical grant to a high school might be assessed as follows, the preliminaries in connection with the submission of the case being assumed complete and the minimum scale of establishment suitable for the school fixed at a monthly cost of Rs. X:—

The capitation will be fixed ordinarily to correspond with

the prevailing rates of fees actually in force in Government high schools, i.e.,—

This scale will then be applied to the figures of average enrolment given in the form of application for grant (Form G to the Code). If any great discrepancy appears between the figures of average and present enrolment, careful enquiry into the reasons for this will have been made, and it may not be advisable to accept the average figures for application of the capitation scale.

Assuming that the average figures are accepted as showing a state of enrolment below which the school is not expected to fall to any serious extent in the near future, the capitation scale will then be applied, as follows:—

\mathbf{X}			•			Rs. 3	A. O		
IX	•	•				3	8		
IIIV		•		•		2	4		
VII					•	2	0		
VI				•	./ -	1	12		
\mathbf{V}					,	1	8		
ΙV						1	4		
III						1	0		
							7	otal 1	Rs.

Final assessment Rs. Z

The difference between this last figure and the prescribed minimum cost of establishment (i.e., X—Z) will give the maximum grant payable to the school, subject to the condition, stated in the code, that the grant shall not exceed the final assessment.

- 9. Primary schools.—Ordinarily, primary schools are under the direct management of local bodies, and are not aided. There is, however, a large number of primary schools chiefly in hill districts, managed by missions, and aided by Government. Grants to such schools, or to their managers, in respect of groups of schools, are regulated by the provisions for special grants in the code.
- 10. Other schools.—A separate system of grant-in-aid is applicable to tols, maktabs and madrasas. The qualifying

^{*}It is in contemplation to raise this scale to Rs. 2 in classes III to VI and Rs. 3 in classes VII—X.

condition in these cases is satisfactory provision for instruction in the ordinary Vernacular school curriculum in addition to the special courses of study for which such institutionsprimarily exist. Fixed grants are given under the provisions for special grants in the code.

- 11. Institutions of these types which are not aided thus directly are eligible for indirect aid in the shape of stipends awarded to their teachers on the results of public examinations of the pupils.
- 12. Effect of existing rules.—Such revision as has been made in the grant-in-aid system, whether in policy or in procedure, is scarcely of long enough standing to enable judgment to be pronounced as to its effect. Thus, the policy of bringing middle English schools under a uniform system of government aid has been carried out, so far, in the case of only a few schools, and the change is quite recent.
- 13. Again, in regard to the abolition of the system of capitation allowances, it might be possible, in normal times, to form some estimate of the effect of this change on the Vernacular school population: but it is impracticable to do so under the abnormal economic conditions now prevailing which have of course an adverse effect on the school attendance. It can be said, however, in this connection that the change has greatly simplified procedure and removed a temptation to dishonest practice on the part of teachers, and that the teachers have found no cause of complaint on the ground of reduction in emoluments.
- 14. Lastly, in regard to the simplification and clearer definition of the general code of rules, which, as already explained were objects in view when the code was changed, experience has justified the change, so far, at any rate, as the practical working of the rules is concerned.

Section B.—Grants to local bodies.

Historical.—The earlier principle that local bodies, i.e., Local Boards, Municipalities and Unions should concern themselves mainly with primary schools, though permitted to make grants to Vernacular schools of higher grade and to Anglo-Vernacular middle schools, has been developed during the period since 1912; and the system now prevailing is that local bodies have direct charge of general education in the vernacular, subject to certain control by the Education Department. Local bodies are still permitted to make grants

to Anglo-Vernacular middle schools, but, as was pointed out in the previous section of this chapter, present policy aims at relieving them, ultimately, of the obligations they have undertaken in this direction.

- 2. How assessed.—Grants made to local bodies take the form of annual subsidies or of special non-recurring grants to meet contingencies. An instance of the latter would be the grant of a specified sum, in any year, to a local body to assist it, for example, in repairing school buildings damaged by storm.
- 3. The annual recurring grants, or subsidies, are not made on any fixed principle of assessment. As money becomes available, from Imperial or provincial sources, allotments are made to local bodies for expenditure. Each new allotment is made in supplement of the existing obligations undertaken, i.e., a local body which has maintained up to any year a certain general standard of expenditure on Education and which receives in that year a new recurring allotment, is not expected to devote any part of the new money to old expenditure, but to use the whole of it for development.
- 4. The amounts given to various local bodies from time to time will depend, naturally, on their relative claims estimated on such considerations as their readiness to spend from local income, the rate of development of their schools, local demand for expansion, and so on.
- 5. Special localities.—Where local bodies of the kind mentioned above do not exist, e.g., in hill districts, the management and development of Vernacular schools, under the general control of the Education Department, is sometimes in the hands of a missionary society. In such cases, grants are given under the provisions of the Grant-in-Aid Code applicable to special grants, as already mentioned in the previous section.

Section C.—Capital grants for buildings and equipment.

Historical.—Changes in the procedure of dealing with grants under this section have been made since the year 1912, and will be understood on a comparison of the Eastern Bengal and Assam Grant-in-Aid rules, referred to in a previous section, with the present Assam Grant-in-Aid Code. Briefly, the former of these sets of rules, which was issued on the ground that the code which it replaced was cumbrous and ill-defined in so far as capital grants were concerned, brought

upon itself, in practice, criticisms quite as serious, owing to its undue insistance on detail and its rigidity. In practice it proved quite unworkable.

- 2. The present code represents no change in policy so far as it concerns capital grants: but the rules have been put in a simplified form and room has been made for the exercise of discretion in administering them. Experience, so far, has shown the change to be for the better.
- 3. System of grants.—In the case of building grants a general proportion of at least one-third private contribution to two-thirds government grant is laid down, with discretion to the Director of Public Instruction to relax this rule when the amount of the grant does not exceed Rs. 1,000.
- 4. In equipment grants, the proportion is equal in the case of high and middle English schools, and one in three in the case of Vernacular boys' schools and girls' schools, with discretion to relax the rule in grants not exceeding Rs. 250.
- 5. The general conditions on which grants of this class are made are not stated specifically. Obviously, good management and an adequate local need for the institution concerned, are implied conditions; but detailed conditions such as are stated in the case of recurring grants may not always be necessary. Thus an institution of special type such as a Sanskrit tol may receive a building or equipment grant, but it is not advisable always even if practicable, to treat such a case on the terms that would be applied to a school for general education.
- 6. Certain special conditions are common to all grants of this class. They consist in due observance of the procedure of application for grant laid down in the code, fulfilment of the prescribed legal formalities, and submission to the requisite conditions for payment of the grant.
- 7. The legal documents used in building grant cases follow, as a rule, one or other of the forms appended to the code (Forms A and B). Form A is preferred, and, whenever possible, cases which would naturally come under Form B are reduced to Form A. Thus, if a simple money grant is to be given to an institution, Form B provides for the mortgage of the property of the institution as security for repayment of the grant. If, however, the managers of the institution or other owners of the property consent to make a preliminary gift of the property or part of it, to Government, it

is then possible to apply Form A, under which the property gifted will be handed back for the use of the institution, together with the amount of grant sanctioned.

[Note.—There are so few European schools in the province that a separate section on such schools is not thought necessary. The Bengal Code for European schools is usually followed.]

CHAPTER XI.

Grant-in-aid System, North-West Frontier Province.

(a) RECURRING GRANTS.

(i) Historical.

(i) Historical.—Before 1913 this Province used to follow the Grant-in-aid rules of the Punjab. These rules were very complicated and shortly described they were as follows:—

A school earned a grant of two kinds (i) Block grant, (ii) Staff grant.

- (i) Block grant was calculated at so much per head for every pupil in attendance. The rate varied according to whether the pupil was in Infant Class, the Lower Primary, the Upper Primary, the Middle or the High Department. It further varied according as the Department was classed as excellent, good or fair from 100 per cent. to 80 per cent. and 60 per cent. of the maximum per head allowable.
- (ii) Staff grants were calculated at one-fifth of the salaries of certificated teachers and of monitors under 19 who had completed the Middle standard. Staff grants were hedged round with a number of restrictions as to the number of pupils per teacher for whom a grant was allowed.

There was a further restriction that a total of the two grants should not exceed (i) in a Primary School one-half the expenditure on tuition, (ii) in a Secondary School one-half the expenditure on tuition plus two-thirds of the excess of that expenditure over the income from tuition fees. Expenditure on tuition was minutely defined and contained such anomalous items as "estimated rent of school buildings for which no rent is paid."

These rules were considered unsuitable in many ways. The reasons were some detailed and some general. The more important of the detailed objections which were advanced are specified below:—

(i) The payment of grant per actual pupil causes the grant to vary in each class. While a fall in the number of pupils in a class from 30 to 25 would not of course affect the number of teachers, it would affect the grant possibly by 155.

- (ii) The distinction between Infants, Lower Primary and Upper Primary was meaningless. The same class of teacher was or should be employed for all three Departments.
- (iii) There was no minimum fixed for a salary of a certificated teacher and only a vague maximum. So that while the Department may give rupees ten in one school towards a teacher whose salary was Rs. 50, in another school it may give Rs. 20 to a teacher with exactly the same qualifications who was paid Rs. 100.

Other details were open to objection but the general objections appeared to be sufficient to condemn these rules. The practice under these rules led to the result that the richer the school was the more it got in grant. The grants earned by poor schools were so small that they were never able to improve their position.

The purpose of grants-in-aid defined in the Punjab Education Code was "for the purpose of extending and encouraging private enterprise in Education."

In this connection Mr. Richey the then Director of Public Instruction, North-West Frontier Province, while submitting the new grants-in-aid rules of the Province to Local Government pointed out that Government did not wish to encourage the starting of superfluous schools which only conflicted with and damaged existing institutions. Recent policy was to withdraw the small grants to the less efficient institutions and to give larger grants to better schools.

Consequently the following definition was arrived at:-

"Grants-in-aid are made from Public Funds in order to enable institutions under private management, supplying an educational need, which cannot be supplied by educational institutions under public management in the locality, to maintain that minimum standard of recurring expenditure which is consistent with proper efficiency."

This definition has completely changed the system of award of grants-in-aid under the Punjab rules. Now the first consideration when a school applies for a grant-in-aid is not "are the promoters prepared to find by fees and other subscriptions a certain amount of money?" but "is there a need for school at all or does it only damage existing schools?"

and if so "will the attendance at the school be sufficient to guarantee a considerable income from fees towards the cost of its maintenance?" The second consideration is "is the management of the school likely to be satisfactory and will it conform to the regulations of the Department in the matters of fees, accommodation, etc.?" If these conditions are fulfilled, Government says that it is prepared to recognize the school on condition that managers maintain that scale of staff and expenditure which Government considers the minimum for efficiency and that Government is prepared to assist the management to maintain that scale. As a result of this the new rules of the Province were framed.

(ii) Present system of Recurring grants.

(Maintenance grants.)

General Conditions.—Maintenance grants are made from District Board and Municipal funds to primary and technical schools situated in the areas under their control, and from provincial funds to secondary schools.

No grant is made to a school the income of which from fees and endowments is sufficient to maintain it in a state of efficiency, and which needs no further development to meet the wants of locality.

In order to be eligible for a maintenance grant, a school must be recognized by the Department, and must also fulfill the following conditions:—

- (i) The rates of fees levied must not be less than threequarters of the rates of fees prescribed by Government for institutions of the same class under public management; and the proportion of scholars exempt or partially exempt from fees must not be higher than the proportion laid down by Government for such institutions.
- (ii) The accounts of the income of the school from all sources and its expenditure under all heads must be kept in the form prescribed by the Department, and must be at all times open to inspection by Government. A return showing the monthly income and expenditure of the school during the preceding year must be submitted annually to the Inspector on April 15th in prescribed form.

(iii) Acquittance Rolls of the staff and menial servants must also be maintained.

Application for Maintenance grant.—Application for maintenance grant must be made in the prescribed form to the District Inspector in the case of primary schools, and to the Inspector in case of secondary schools. The officer receiving the application shall after inspecting the institution forward a report to the Director of Public Instruction, who will decide on the application in the case of secondary schools and in the case of Primary Schools, forward the report, together with his recommendations to the local Body concerned.

In Anglo-Vernacular Schools.

The following minimum scale of staff and expenditure was prescribed for the Anglo-Vernacular schools:—

High Department.

						Rs.	
One S. A. V.	on .		•	•		100 per	mensem.
One S. A. V.	or B. A.	on				80	,,
One S. A. V.	or B. A.	on		•		60	,,
Contingencies	•		.•	•	•	60	,,
_			•		-		
						300	**
		-			_		

Middle Department.

						Rs.	
One J. A. V. on						50 per	r mensem.
One J. A. V. or F		-			•	4 0	"
One J. A. V. or F.			•	•	•	40	11
One oriental or scie				n.	•	30	,,
One oriental teacher				•	•	30	,,
One oriental teache	er S.	٧.	\mathbf{on}	•	•	20	,,
One J. V. on	•	•	•	•	•	20	**
One Drill Master		•	•	•	•	20 59	**
Contingencies	•	•	•	•	•		11
						300	,,

In all Schools.

- (i) The proportion of pupils in average attendance to the number of teachers on the staff must not exceed 40 to 1.
- (ii) Not more than 45 pupils may be enrolled in any single section of a class.
- (iii) No teacher in permanent employ may receive a salary of less than Rs. 8 per mensem.

(iv) No certificated teacher may receive a salary of less than Rs. 12 per mensem.

Maintenance grants are divided into three kinds:—

- (i) Ordinary maintenance grant.
- (ii) Special grant.
- (iii) Additional grant.

Maintenance grant.—(i) The ordinary maintenance grants are calculated by deducting average monthly income from fees calculated at full rates from the minimum scale of expenditure prescribed for such a school. The difference between the estimated fee receipts and the standard scale will form the amount of grant.

It may appear from the above that the managers of the schools are relieved from all financial responsibilities but this is not so. In the first place they are required to provide adequate building and equipment though here too the Government helps them up to the limit of the moiety of the cost. In the second place the Government only assists a school with sufficient funds to meet the minimum cost of the staff but if the school wishes to keep the staff it will be obliged occasionally to raise their pay. All the additional cost must be met by private subscriptions and endowments.

Special grant.—(ii) A special grant is payable for every teacher of an anglo-vernacular school possessing higher qualifications than those prescribed for his post in the standard scale or possessing the requisite qualifications but drawing higher pay than that assigned to his post.

The special grant is calculated as follows:—

- (i) For every graduate or possessor of a Senior. Anglo-Vernacular certificate occupying a post assigned to a teacher of lower qualifications an amount of Rs. 20 per mensem.
- (ii) For every teacher possessing the requisite or higher qualifications but in receipt of a higher salary than that assigned to his post, an amount equal to half the excess salary.

In the event of a teacher qualifying for grant under both (i) and (ii) the special grant earned under (i) is deducted from the excess salary for the purpose of calculating the grant under (ii).

Additional Grant.—(iii) An additional grant is payable for teachers employed in excess of the standard scale in prescribed circumstances:—

(i) When the average attendance in any class exceeds 40

and the employment of an additional teacher is therefore obligatory.

- (ii) When the employment of a specialist teacher for a subject requiring expert knowledge, e.g., drawing or typewriting is sanctioned by the Department.
- (iii) When the opening of a special class has been authorized by the Department. In such cases the grants will not be admissible till the class has been in existence for two years with an average attendance of not less than five pupils.

A teacher employed under any of the above conditions is treated as an additional member of the staff for the purpose of calculating maintenance grant carried by the school in which he is employed. His salary is reckoned for this purpose as equivalent to the minimum salary assigned to a teacher of similar qualifications in the standard scale but special grant is also payable for him if his salary exceeds the prescribed minimum.

A. Vernacular Secondary and Primary Schools.

The prescribed minimum scale of staff and expenditure in a recognized Vernacular School is as follows:—

- (i) The proportion of pupils in average attendance to the number of teachers on the staff must not exceed 40 to 1.
- (ii) Not more than 45 pupils may be enrolled in any single section of a class.
- (iii) No teacher in permanent employ may receive a salary of less than Rs. 8 per mensem.
- (iv) No certificated teacher may receive a salary of less than Rs. 12 per mensem.

B. In Vernacular Schools.

- (i) When the average attendance of pupils at a school exceeds 70, one of the teachers employed must be certificated.
- (ii) A proportion of one certificated teacher for every 70 pupils in average attendance must be maintained. (e.g., in a school with an average attendance of 250 pupils the staff must consist of at least seven teachers of whom three at least must be certificated.)

APPENDIX.

EDUCATION, ENGLAND AND WALES.

Elementary Education:—Regulations for Substantive Grant for the Financial Year 1922-23.

The Board of Education hereby make the following Regulations:-

- 1. The substantive grant payable by the Board of Education to Local Education Authorities in aid of Elementary Education is payable, subject to the conditions of these Regulations, for the year beginning on 1st April.
- 2. Formula for the calculation of the grant.—The grant payable for the year will be based upon the average attendance, the produce of a rate, and the expenditure of that year, according to the following formula:—

Thirty-six shillings for each unit of average attendance in Public Elementary Schools maintained by the Authority (not including any schools for blind, deaf, defective, and epileptic children*), with the addition of the following amounts:—

- (a) Three-fifths of the Authority's expenditure on the salaries of teachers in those schools:
- (b) One-half of the net expenditure on special services; and
- (c) One-fifth of the remaining net expenditure on Elementary Education;

less the produce of a sevenpenny rate upon assessable value in the area:—

Provided that the expenditure to be recognised in any area will be subject to such limits as are, in the opinion of the Board, necessary in order that the total grants may be fall within the amount voted by Parliament for that purpose.

- 3. Calculation of Expenditure.—In calculating expenditure for the purposes of these Regulations the Board will ascertain the expenditure of the Local Education Authority from the Education Account prescribed by the Education Accounts (Annual Statements) Order, 1921 but will exclude—
 - (a) Expenditure which in the opinion of the Board of Education is attributable to any service in respect of which payments—not being payments under the Agricultural Rates Act. 1896 (59 & Co. Vict. c. 16)—are made by Government Department other than the Board of Education;

Thus the expenditure on Industrial Schools will be excluded, being a service in respect of which payment are made by the Home Department.

- (b) Any sum applied towards the repayment of a loan raised under the Education (Provision of Working Balances) Act. 1903 (3 Edw. 7, c. 10);
- (c) Payments to another Local Education Authority (including payments for "special services") in respect of children for whom the paying Authority is responsible:
- (d) Any expenditure not recognised by the Board as expenditure in aid of which Parliamentary Grants should be made to the Authority.

^{*}Schools for blind, deaf, defective and epileptic children are included among the special services [see Article 11 (v).]

- 4. Maximum limit.—The grant shall not, except as provided in Article 5 below, exceed the greater of the two following amounts:—
 - (a) Two-thirds of the net expenditure;
- (b) The excess of the net expenditure over a sum comprising the produce of a rate of twelve pence upon assessable value in the area, together with the grant under the Agricultural Rates Act; and if the grant calculated under the formula would exceed this maximum limit it shall be reduced accordingly.
- 5. Minimum limit.—The grant shall not be less than one-half of the net expenditure, and if the grant calculated under the formula would fall short of this minimum limit, it shall be increased accordingly.
- 6. Additional grant in highly-rated areas.—(i) In those areas in which the grant calculated as above would, when addded to the grant under the Agricultural Rates Act, fall short of the net expenditure by a sum exceeding the equivalent of a rate of the prescribed amount, an additional grant equal to the prescribed proportion of the amount of such excess shall be payable.
- (ii) The "prescribed amount" and the "prescribed proportion" for the purposes of this Article are subject to periodical revision. For the year 1922-23 the prescribed amount is forty-eight pence and the prescribed proportion is one-half.
- (iii) Additional grant under this Article shall not exceed such additional grant as would have been payable had the Estimates, passed by the Authority and adopted by it as the basis on which the education rate was levied in the area from the beginning of the year, proved to be correct.
- (iv) If in any area those Estimates show an increase over the expenditure on which the additional grant for 1921-22 was calculated, the Board may exclude the excess or any part of the excess from the expenditure upon which the additional grant under this Article will be calculated.
- (v) In considering any claim under this Article the Board will have regard to—
 - (a) The standard of expenditure in other areas not receiving additional grant under this Article;
- (b) The special circumstances of the area; and, if they are not satisfied that due economy has been observed in the area, may limit the amount of the expenditure in respect of which they will pay additional grant.
- (vi) In order to receive additional grant under this Article the Authority must, at the time when it forwards its Estimates to the Board, furnish full explanations for the purpose of satisfying the Board on these points; and provisional inclusion by the Board of expenditure for the purpose of determining the instalments pavable in the year is not to be regarded by the Authority as committing the Board to the final approval of it for the purpose of this Article.
- 7. Conditions of grant.—The grant is conditional upon the Board being satisfied that the Authority—
 - (i) has performed its duties under the Education Acts:
 - (ii) has complied with the conditions of the Regulations of the Board for Public Elementary Schools, special schools, and other special services;
 - (iii) has supplied punctually such information and returns as the Board require.

If the Board are not satisfied on any of these matters they may withhold or make a deduction from the grant.

If a deduction is made exceeding five hundred pounds or the amount which would be produced by a rate of a half-penny in the pound, whichever is the less, a report stating the amount of and the reasons for the deduction [will be laid before Parliament [Education Act, 1918 Sect. 44 (5)].

- 8. Proviso to Article 5 and 6.—The grant shall not be increased under Article 5 or Article 6 so as to make good to the Authority any sum withheld or deducted from the grant under Article 7.
 - 9. Instalments.—The grant will be payable by instalments—
 - (a) A sum estimated to amount to 90 per cent. of the grant payable for the year will, subject to the provision by Parliament of the necessary monies, be payable by monthly instalments on account during the year.
 - (b) The Board may also pay by way of instalment during the year any further sum that appears to them to be payable in order that the provisions of section 44 (2) of the Education Act, 1918, may be satisfied.
 - (c) If after end of a year it is found that the expenditure of that year would justify further instalments being paid pending final adjustment, such further instalments as the Board direct, based on returns of the average attendance, the expenditure, and the produce of a rate for the year, may be paid before audit.
- 10. Final Adjustment.—The grant will be finally adjusted after the audited accounts for the year and any other returns required by the Board for the purpose have been received and examined.

It will be calculated to the nearest pound, a fraction of a pound in the final result being ignored or reckoned as a pound according as it is, or is not, less than ten shillings.

- 10. (a) Payment of grant will not be made more than once in respect of the same expenditure; and in determining the amount of grant payable for the year under these Regulations, account will be taken of any payment made or to be made under Grant Regulations, No. 2, in respect of the same year.
 - ii. Definition of Terms.—For the purposes of these Regulations—
 - (i) "Average attendance in Public Elementary Schools" means the average attendance, as computed in accordance with the Regulations for such schools, for the twelve months beginning on the 1st April.
 - (ii) "The produce of a rate" will be calculated in the manner prescribed by the Education, (Produce of Rate) Order, 1903, and the Education (Produce of Rate) London Order, 1904, and in the area of a Local Education Authority, not being a County Borough, it will be calculated upon the County Rate basis.
 - (iii) "Nnot expenditure" means expenditure as calculated under Article 3, less all receipts relating thereto except receipts from rates, or from grants, or under the Agricultural Rates Act, or from another Local Education Authority (including receipts for "special services") in respect of children for whom that Authority is responsible.
 - (iv) "Expenditure on Salaries" means gross expenditure on salaries of teachers in Public Elementary Schools without making any deductions under the Elementary School Teachers (Superannuation) Acts. Salaries will be reckoned in money payments only and will not include the estimated value of other forms of emolument, e.g., house accommodation.
 - (v) "Special services" consist of the following:—
 - (a) School Medical Service, including Medical inspection and Medical treatment of children attending Public Elementary Schools;
 - (h) Provision of Meals;
 - (c) Schools for blind, deaf, defective and epileptic children;

- (d) Organisation and supervision of physical training in Public Elementary Schools;
- (e) Evening play centres; and
- (f) Nursery schools.
- 12. Final Decision of the Board.—If any question arises as to the interpretation of these Regulations, or as to the inclusion or exclusion of any items of receipt or expenditure for the purpose of calculating the grant, the decision of the Board shall be final.
- 13. These Regulations may be cited as the Elementary Education (Substantive Grant) Regulations, 1922.

Given under the Seal of Office of the Board of Education this 11th day of July, 1922.

L. A. SELBY-BIGGE,
Secretary to the Board of Education.

BUREAU OF EDUCATION

INDIA

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FOREWORD.

The five articles in this volume have this in common that they are all first-hand accounts of experiments which are proving successful. As such they may serve to encourage other workers in the field of Indian education to face the difficulties which confront the educational reformer. The first three articles deal with experiments in the Dalton system in Indian schools, the fourth is an account of a rural school and training class run on novel lines and the last is a description of a very complete system of school medical inspection in a town of some thirty thousand inhabitants. The articles are printed in the form in which they were received. An introductory note on the Dalton system has been added, as the authors of the first three articles assume a knowledge of it which may not be common to all readers.

J. A. RICHEY,

Educational Commissioner, with the Government of India.

ДЕ**L**HI,

12th November, 1926.

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A NOTE ON THE DALTON PLAN.

The Dalton Plan takes its name from the Dalton High School, Massachusetts, where it was first introduced by its originator, Miss Helen Parkhurst. A full description of the Plan will be found in Miss Parkhurst's book "Education on the Dalton System."

The Plan may be described as an attempt to organise the work of a large secondary school in accordance with recent tendencies in educational theory and practice. Education now tends to lay stress on the individual child as opposed to the class as the unit of teach-Methods of class instruction have, since the time of Herbert, been developed to a very high standard of efficiency. systems of class teaching have certain serious defects inherent in the very nature of class teaching. Firstly, the rate of progress of the class during each lesson period and during each school year is regulated by the pace of its slower members: secondly, the initiative rests throughout with the teacher. The questioning, for example, is all on the side of the teacher while the same amount of time is spent by each pupil in the study of each subject. The better organised, the better disciplined the class, the less scope is there for originality on the part of any particular pupil and the less account is taken of individual aptitudes.

Noteworthy attempts to break away from the rigidity of the class system have been made by Dr. Montessori and by the pioneers of the "free discipline movement," while the "project method," which extends the unit of learning beyond the single lesson period, is also designed to encourage initiative on the part of the pupils. Although the followers of Dr. Montessori have achieved a certain success with small and backward children, all attempts to introduce individual teaching for older children in large schools have hitherto broken down over difficulties of organisation.

The Dalton Plan attempts to incorporate the better features of these modern movements in the work of the secondary school.

The first advantage to which it may lay claim should go far to disarm the criticisms of conservative teachers: it does not upset the class system of the school and it can be introduced piecemeal. Let us assume that it is proposed to make a modest beginning by introducing the new method for the teaching of three subjects only, history, geography and science, in the Middle Department. The first step is to prepare three rooms to serve as laboratories in these subjects. To the history room will be transported all the textbooks, library books, maps, charts, etc., which will be useful to pupils of the Middle Department in the study of history. The geography and science laboratories will be similarly equipped. The next step is to decide what period of the school time should be devoted to laboratory work. Supposing that twelve hours a week is the aggregate amount of school time ordinarily devoted to these

three subjects, then two hours a day for five days may be transferred to laboratory work, the remaining two hours being reserved for class teaching in these subjects. All the other subjects of the curriculum will continue to be taught as heretofore by the ordinary class system during the remaining periods of each day. The third and most difficult step is the organisation of the laboratory work. form master will assign to each pupil in his class the work in each subject which he must cover within a fixed period, e.g., a fortnight. The subject matter of the assignments given to every pupil in a class should be identical though, as explained hereafter, considerlatitude is permitted in the standard of different assignments. Each assignment should be in the form of a project, i.e., it should be complete in itself and not any arbitrary and artificial task such as the study of so many pages of a text book; for example "The causes of the rise of the Mahratta Power," "The Geography of China," "Pulleys" might form the subjects of assignments. The assignment which must be written or typed should, in addition to naming the subject, contain questions and instructions to guide the pupils in their work, including references to the pages of text books and the names of other books bearing on the subject of the assignment. In order to allow for the different aptitudes and interests of the children, alternative assignments covering the same project may be given. The simplest method is to give two grades of assignment in each subject in each class. Grade "B" is the minimum amount of work which should be covered even by the most backward pupil; the same project treated more fully will form the "A" assignment, and will only be undertaken by those pupils who are strong in that subject. It will rest with the boy himself, though he will naturally be largely guided in this matter by his master, to decide whether he will contract for the "A" or "B" assignment in any one subject. If, for example, he is strong in science and weak in history and geography, he may take on the "A" contract in science and the "B" contracts in the latter two subjects. If at the end of the fortnight it is clear that the "A" work was beyond him, he will be content with the three "B" assignments for the next contract. This contracting by the pupil to cover the work assigned to him is one of the essential features of the Dalton Plan. It throws the responsibility for completing the task on the pupil who has promised to fulfil his contract. In some schools an actual form of contract is signed by each pupil and handed over to the teacher.

But it would be unfair to expect the pupil to fulfil his contract if he were also not given a freehand to work at it as it seemed to him best. We now reach the central feature of the Dalton Plan. The boy having assumed his contracts now enters on the fortnight's work in which he is to complete them. At the beginning of the two hours' laboratory period he enters whichever of the three laboratories he likes; he decides, for example, to begin with geography. On entering the geography room he may find some other boys of his class there. It is open to him to join them in their work. This

system of group working is also an essential feature of the Dalton Plan. He will find in the room all materials that he will need for his work. He will also find a geography teacher sitting at a desk to whom he may take any problem which arises for solution. There is no need for him to stay in the room when his interest in the subject has flagged. He may then proceed to either the history or the science room. In short the time of each pupil during the laboratory periods is at his own disposal provided only that he works in one or other of the three laboratories and is not disturbing the work of the other pupils. Whereas under the class system he may have had to devote six hours a week to arithmetic for which he has a natural bent and the same number of hours to history and geography which he finds difficult, he may, under the Dalton Plan, complete his arithmetical assignment in three hours and transfer the three hours saved to his weaker subjects.

At the same time some daily measure of time and work is necessary if only to warn a boy when he is getting behindhand with any one of his contracts. Various devices are used for this purpose. simple method is the following. Each assignment is divided into units of approximately equal lengths, e.g., five weekly units. Outside each laboratory is hung a chart on which the names of all the boys are entered with blank columns for units opposite to the names. When a boy leaves the laboratory, he draws a line across one or more blank columns opposite to his name on the chart, thus indicating the number of units he has just completed. In addition to the laboratory charts, it will add considerably to the interest of the children if separate cards are supplied to each of them similar in form to the laboratory charts but with the names of the subjects entered in the first column. This card is filled in by the boy in the same way as the laboratory chart by drawing a line through the units opposite to the subject which he has just studied. While the plan is in its early stages, it may be of advantage to have the entries on the boys' cards certified by the teachers in charge of the labora-The proper fulfilment of the contracts is tested by the form master either by requiring the boys to record notes of their work in the form of answers to questions supplied in the assignment, or by tests in the form at the end of each assignment period, or perferably by both means.

Finally, and this is a most important point, no home work is required in laboratory subjects. If a boy finds that he cannot complete his contract in any subject in the laboratory in the time at his disposal, he is at liberty to work at it at home. But the assignments should be so drawn up that it should be unnecessary for him to do so unless he wastes his time in school.

The foregoing short description of the Dalton Plan would be incomplete if answers to some of the more obvious criticisms that suggest themselves were not offered. These answers are derived from the experience of headmasters and teachers who have tried the plan.

In the first place, how does the plan affect discipline? At first it is admitted that there is a certain amount of confusion owing to boys attempting to enter laboratories which have already their full complement of students, caused also by unnecessary talking by the more light-hearted boys in corridors and laboratories, etc. But even in England it is found that this phase is soon over and it is unlikely to be so acute in India, where discipline is much more easily maintained owing to the genuine desire of most of the boys to succeed in their work.

Secondly, is there not a temptation for boys to neglect those subjects which are distasteful to them? The methods by which such neglect is checked, i.e., the laboratory charts and pupil cards, have been described and it is of course the duty of the form master to keep an eye on the work of his form. As a matter of fact, it is often found that a boy first tackles the subject in which he is most backward, reserving for his easier moments his favourite subjects.

Thirdly, the drawing up of assignments is undoubtedly a matter of some difficulty. It will be realised that this difficulty only exists in the earlier stages under the new system. In a year or two a set of standard assignments for each class in each subject is evolved, which may of course be modified from time to time in the light of experience, but which will relieve teachers of this initial responsibility. Actual sets of standard assignments have now been published for use in English schools though, except as models of the form which assignments should take, they will probably be of little use in Indian schools.

Fourthly, until the assignments have become standardised, until both boys and masters are accustomed to working under the new system, the Dalton Plan undoubtedly makes a serious demand on Apart from the great care needed in drawing up suitthe teachers. able assignments and explaining them clearly to the boys before they undertake their contracts, the work of allotting suitable assignments to each member of his form and of checking their progress from their notes and by periodical tests requires a genuine interest on the part of the teacher not only in the subjects which he teaches but also in the capacities of individual pupils. The task of supervising laboratory work, though it will naturally be distributed amongst those teachers who are specialists in the various laboratory subjects, is in itself sufficiently arduous. Any one who has supervised preparation time in the school when boys of different ages and at different stages of progress ask for help from the supervisors will realize that this requires more of a master than the same period spent in ordinary form work.

Mr. G. A. Small, I.E.S., Inspector of Schools, Assam, makes several suggestions based on his practical experience of the working of the Plan in Assam schools:—

(a) The boys should bring up units of work for correction, not whole assignments, otherwise the teacher is overwhelmed with masses of correction at the end of the assignment period.

(b) No new assignment should be given to any boy in any subject until his previous assignment in all subjects is passed by the subject teachers, exceptions to this rule must receive the headmaster's sanction.

In spite of these and other difficulties Mr. Small says "I do not think any teacher who is interested in his work and has tried the Dalton Plan would willingly go back to ordinary class methods. He gots to know his boys personally and finds that dealing with their individual difficulties, though tiring, is more interesting than dealing with them as a class."

THE DALTON METHOD IN THE SHILLONG GOVERNMENT HIGH SCHOOL.

One of the commonest arguments used by the critics of the Dalton method in Indian schools is that it is impracticable. atmosphere of an Indian school and of an Indian home, it is said, is so different from that of England and America that the method is bound to be a failure. Moreover the paucity in the Indian vernaculars of books of reference and books of general interest for young people, the fact that the reading of books other than school textbooks is, for various reasons, uncommon, and the further fact that the education of boys in the upper classes is conducted through the medium of a foreign tongue seem, at first sight, to justify this contention very much. While it is conceded that the brighter boys coming from well-to-do-homes may derive some benefit from the Dalton Method many fear that the effect of such a method on dull, slow boys and on boys who have to be compelled to study at every point, is bound to be bad. It is further argued that the method, in order to be successful, demands accommodation and apparatus on a scale impossible except in a very few favoured schools.

It is nevertheless a fact that the method can be made a very real success even where the conditions seem, from every point of view, to militate against its introduction. It would be difficult to find a school where conditions for the introduction of the Dalton Method are less favourable than the Shillong Government High School. In it provision has to be made for the education, not only of Bengalees and Assamese, but also of boys belonging to eight or ten different Hill Tribes all speaking different languages. In none of these languages is there a literature worthy of the name. of them, Khasi, has not a hundred books all told, whereas most of them are limited to a few reading primers and some portions of the Most of these languages are not recognised by the Calcutta University even for translation purposes with the result that these boys, in addition to being taught through the medium of English, have to learn another tongue to serve as a vernacular for examina-Again, few of the parents of these boys are in a tion purposes. position to give their sons any help at home. The majority of them are poor cultivators who themselves have had little or no education, and, if it is true that the greatest impetus to study is to live in the company of studiuos people, it will be seen that very little help can be got for the Dalton Method from the home life of the majority of the Hill boys.

For the last twelve years the question of increased accommodation has been urgent in the Shillong School. On this point Inspectors, Directors of Public Education, Ministers, and Governors are of our mind, and it is calculated that at least eleven extra classrooms are required to provide the school with the accommodation it needs. Scarcity of funds alone has delayed the provision of the required additional accommodation. From no point of view, therefore, is the school exceptionally well fitted for the introduction of the Dalton Method. And yet, in spite of all these disadvantages, the method, as modified to suit our needs, has been an unquestionable success.

Practically everybody interested in education is discontented with things as they are. The curriculum is undoubtedly too confined to purely literary subjects. It needs broadening. It needs to include subjects which will enable the boys to take a far greater interest and pleasure in the world around them and in the course of everyday events. Its tendency is to estrange boys from village life without creating in them an appreciation of the resources and possibilities of real culture in village life, and equipping them to utilize those resources and culture.

But however much we may desire to modify and change the curriculum most of us have to accept the curriculum as laid down for us by the powers that be. But even with the present curriculum a great deal can be done by the adoption of better methods. Important as the question of subject matter undoubtedly is, and urgent as the need is to lead our pupils to fields of study which will demand more real thinking and create an attitude to problems and to life which will enable them to preserve, develop, and utilize the culture and resources of life round about them, it is nevertheless true that almost any subject matter can be made the means of enlightment, inspiration, and mental and spiritual discipline and development, provided the method of study adopted trains the boys into the right attitudes.

It is from this point of view that the Dalton Method is of the highest service. What are we aiming at in all our educational work?

We wish, in the first place, to enrich the lives of our pupils and to open to them the doors of the untold wealth which the literatures of the world possess. We wish, not only to prepare them for life but to prepare them against life, i.e., to give them means and resources of cultural and spiritual development which will enable them to rise superior to the poverty of the conditions in which so many of them must live.

We wish, too, to give them a mastery of the mechanism of learning so that they may know where to obtain the information which they need and how to adapt that information to the solution of the problems which they may have to face alter on in life. This involves the need of teaching our pupils the effective use of the books and sources of information. It implies their introduction to a far wider range of books and problems than the ordinary text-book method allows.

Various efforts have been made in the Shillong school from time to time to remove the obvious defects of the old system of class-teaching. In order to ensure regular study throughout the year in the place of fitful bursts of cramming just before the terminal and the final examinations the system was once tried of giving daily marks for work tested and done in class and of adding the percentage of marks thus gained throughout the year to the percentage of marks gained in the final examination of the purposes of proportion. Again, in order to do away with the waste of time involved in keeping back in the same class for another year a boy who had failed in one particular subject, an attempt was made, on the suggestion of the Director of Public Instruction, to promote boys by subjects, i.e., a boy might be in Class VIII in English in which he was strong, and in Class VI in Mathematics, in which he was weak. But whatever merits or demerits such a system might have had it was found impracticable in a school where so many interests had to be served to arrange a time-table in such a way as to permit of this being done.

Three years ago, i.e., in 1923, it was decided to introduce a very modified form of the Dalton Method into the school. The history of the experiment will be of interest if only to show that the spirit of the Method can be followed even if the letter cannot be carried out in every detail.

In education, as in religion, it is of utmost importance to distinguish between the letter and the spirit. Nothing would be easier than to reproduce all the mechanism of the Dalton Method and yet miss its essential spirit. The Method involves such a revolution in education that we must not be surprised if teachers who have been trained in quite another atmosphere and who have never seen the Dalton Method successfully worked out are sceptical and afraid of its introduction. The success of the Method depends so much upon the enthusiasm and spirit of the teacher that it is of the utmost importance that he should be wholeheartedly convinced of its value and converted to its point of view.

The Dalton Method is itself a development, the result of a series of experiments and improvements conducted over a series of years. Moreover, it is a method capable of considerable modification according to the circumstances of the school into which it is introduced. In introducing it into the Shillong High School I was more concerned, during the first year, with leading the teachers to see what was being aimed at, and with helping them to get the new point of view than with anything else.

The form which the experiment took was, therefore, to introduce a very modified form of the Dalton Method. Eight classes were selected for the experiment, viz., three sections of Class VIII, three sections of Class VIII, and two sections of Class IX.

- 1. Monthly assignments were prepared and given to the boys which aimed at:—
 - (a) indicating to the pupils the amount of work they were expected to do in a month,
 - (b) pointing out the essential and important things to be mastered and the difficulties that would, probably, be encountered.
 - (c) demanding real preparation and thought.

- 2. Two periods a day were given over to free study. During the first year no attempt was made to establish Subject Laboratories. Each class remained in its own room during the periods of free study. During these periods there was no class teaching. The pupils were at liberty to take up any subject they liked while the teacher in charge was ready to help the boys with the difficulties they could not solve. The same teacher was not in charge of the same class throughout the week, but the teachers were so arranged that during the week the pupils would get the help of teachers who were experts in all the various subjects studied.
- 3. Nor was the grap system as yet introduced but a monthly examination was provided as substitute for the time being. Class-teaching, however, gradually underwent a definite change. More time was spent in testing the boys and in finding out what their difficulties were. It was found unnecessary to do in class all the work that used to be done. As a result the efforts could be confined to real difficulties and the teacher found it was possible to cover more ground.

It may be argued that there was very little of the Dalton Method about this, but the results of the experiment were, nevertheless, very valuable.

In the first place, it gave the teachers valuable experience in the preparation of assignments. These assignments were presented to me every month for inspection and criticism. They were further modified and improved in the light of actual experience from month The effort to look at the work to be done from the point of view of the pupil rather than that of the teacher was in itself a valuable discipline of thought, while the teacher was compelled by failure to put more care and thought into the planning of his work. The assignments were often very imperfect and it would have saved the headmaster much time and trouble if he had undertaken the preparation of the assignments himself. But the temptation to do this was resisted. So much in the Dalton Method depends upon the ability of the teacher to put himself in the place of his pupils and to plan out his assignments well that I should have been perfectly satisfied if we had got nothing more out of the first year's experiment than this experience in the preparation of assignments.

But a great deal more was gained. It gave a new point of view to the pupil as well as to the teacher. It shifted the responsibility for progress to some extent at least from the shoulders of the teacher to that of the pupil. The pupil saw clearly before him the course of study that he had to follow; he was given a definite idea of the amount of work he was expected to do within a stated time: he found that he had to prepare in anticipation of the lesson to be given by his teacher: and, finally, he came to look upon his teacher from a new angle, i.e., as a helper in trouble instead of as a driver.

No one could help noticing the difference in the atmosphere during the periods of free study as compared with that of the ordinary classes. Everybody was hard at work and there were three reasons for this. First, each student was busy with work of his swn choice. Secondly, he was out to get all the help he could from his teacher. Third, he found that many of his problems could be easily solved when tackled in co-operation with two or three of his fellow-students. The teachers, too, soon found that at no time in the day were they so hard at work as during the Dalton periods.

At the end of the year when we met as a body of teachers to discuss the year's work we found that more work had actually been covered than in previous and that the experiment had been too valuable to return to the old methods. But it was also felt that, if we were to go on with the method it would be necessary to introduce Subject Laboratories as soon as possible.

The Subject Laboratories were introduced in the following year. If our accommodation had permitted and if our teachers had had the necessary qualifications we would have arranged the following Laboratories:—two for English, one for Bengalee and Assamese, one for Khasi, one for each of the following, Algebra, Geometry, Arithmetic, History, Geography, and Sanskrit. We were compelled, however, to be content with eight only and as we had not enough teachers with the necessary qualifications to have three Mathematical Laboratories arranged according to subjects we had to be satisfied with the following:—one Laboratory for English, Bengalee, and Assamese: another for English and Khasi: three Mathematical Laboratories arranged by classes, i.e., one for Class VII, one for Class VIII, and one for Class IX: and one each for History, Geography, and Sanskrit.

For these Laboratories we had neither special apparatus nor books. What books and apparatus we had, viz., Geographical and Historical maps, charts, and pictures, Geographical apparatus, reference books and dictionaries we put out in the various Laboratories. But they were far from being equipped as an ideal Laboratory should be equipped.

During the periods set apart for the Dalton Method, i.e., during the last two periods of the day the boys were given freedom to go to any of the Laboratories they liked. This freedom, however, was a freedom within limits. In the first place before starting work each class gathered in its own class-room for roll-call, and at the close of the day before dismissal it returned again for a final roll-Moreover it was made clear to the boys that they would have to spend at least three quarters of an hour in the first Laboratory chosen before they would be allowed to leave for another Laboratory. As the Laboratories are meant for study and not for testing, which takes place mainly in the periods set apart for class-teaching, it was held that at least three quarters of an hour should be devoted to a subject if any real work was to be done. At the close of the three quarters of an hour a bell was rung and the boys were at liberty to go to another Laboratory at any time they liked. It has been found from experience that the majority of the boys are ready for a change after three quarters of an hour. Still, many go on for another

fifteen or twenty minutes and make a change then, and some are found, especially in Mathematics, devoting the whole of the two periods to the one subject.

One of the great fears in the minds of parents and others was lest the boys should abuse the freedom given and play truant during the periods devoted to free study. Efficient checks have been provided against this possibility. In every class-room, after the roll-call, the number present in each class is recorded on the Blackboard. Later on when the boys from the different classes have settled down to work in the various Laboratories the number from each class is further recorded and changed as boys come and go. For instance, the Blackboard in Geography Laboratory held in Class VII-B room may have the following written on it:—

\mathbf{Class}	VIIB.					No. 1	prese	nt	25
	9 A		-, •			•		•	12'
•	9B		•		•			•	3
	8A		•	•	•	•	•	•	5
	8B		٠	÷	•	•		•	2
	8C	٠	•		•	•.	•	•	0,
	7A	•	• .	•		. •		•	6
	7B	•	•	•			•	•	0
	7C	•,	•		•		•	•	8
						To	LAL		- 36

The Headmaster, or the Assistant Headmaster, goes round the various Laboratories for supervision, etc., two or three times a day, and, without any trouble is able to check the number of boys present with the number on the roll. The plan has been found a most simple and efficient check upon any possible truancy.

The introduction of the Subject Laboratories was an immediate success. Every visitor to the school was impressed by the unmistakable atmosphere of study in the Laboratories. The teachers were pleased both with the quantity and the quality of the work done, and the gratifying thing was that the boys spent most of their time in studying the subjects in which they were weakest.

During the third year still another step forward was taken and class graphs, according to subjects, were introduced and the work of the boys was recorded as it was finished and tested. These graphs proved of the greatest utility. They enabled the teacher to see clearly how his pupils were getting on and which of his pupils specially needed his help and guidance. They revealed to the pupils themselves where they stood with reference to their work and to other pupils. They proved an incentive to more rapid and efficient work. They called for better and more thorough testing. As a result of the introduction of these graphs every boy in the school was found to have completed his assignments for the year by the

month of November. This meant that the whole of the work set out for the year had been covered and revised. It meant that every boy had covered the whole of the course and not simply such parts of it as he himself had decided were of importance from an examination point of view.

A study of the promotion results of the school for the last three years bears eloquent testimony to the value of the Dalton Method, the more so when the difficulties we have to contend with and the type of pupil we have to cater for are kept in mind. In 1923 the percentage of pupils promoted to the next class was 70 per cent. In 1924 the percentage had risen to 80 per cent., while in 1925, 87 per cent. of the pupils were promoted. In addition to this far more work was covered and undoubtedly better done.

The fourth year has seen the introduction of the Individual Graph and the extension of the Dalton Method to the Matriculation Class (Class X). Hitherto it had been felt unwise to subject so important class to an educational experiment of this sort and the class was allowed to go on along the old lines. But the results in the other classes showed such a marked improvement as the result of the introduction of the new method that at the end of 1925 it was unanimously decided by the teachers that the Dalton Method should be extended to Class X as well.

In the same staff meeting it was also decided to introduce the Individual Graph from the beginning of 1926. The Glass Graph recorded the work of a class in one subject only and while it enabled the teacher to see how the whole class was getting on in any one particular subject, and which of the boys were lagging behind and in need of special help, it did not show how each boy stood with regard to his work as a whole. The Individual Graph records the month's work of each boy in every subject, and since a boy is not allowed to start on the second month's work until the whole of the first month's has been done the Individual Graph is already proving a boon both to the boy and the teacher who is thus enable to direct the boy more carefully as to the more effective use of his time.

As a result of the extension of the method to Class X an extra room has been made available for the purposes of Subject Laboratories so that now we have the following Subject Laboratories:—

Arabic and Assamese 1 room.

History . . . 1 room.

Geography . . . 1 room.

The following actual figures are a fair indication of the way in which boys generally exercise their choice in the matter of Subject Laboratories:—

			May	5th	1926.	May 7th 1926.
English			•	•	73	86
Mathematics	•	•	•		133	103
Geography	•	•		•	35	35
History	•			•	26	19
Sanskrit and H	Bengalee			•	30	28
Arabic and Ass	samese				5	8

These figures vary, of course, from day to day, but the above figures are a fair average of what is found most days.

Assignments.

Assignments are prepared as follows:—In the month of November the course of study for the following school year, which begins early in February in this school, is carefully worked out.

The year's work is divided into nine assignments, which includes one final revision assignment for November and part of December. Each assignment gives the work expected from the boys in one month, and is further divided into four weekly periods, consisting of three units per week. Three years' experience in the preparation of assignments has given the teachers a fairly accurate idea of how the work can be planned out to ensure even working throughout the year. As the units are completed the boys go up to the teachers to be tested and if the work is found satisfactory the class and the Individual Graphs are filled in accordingly.

Specimens of Assignments.

ENGLISH.

Class VII. May 1926—4th week. Text Book: The English Dalton Course by John Eades.

4th Week.

1st Unit.

- 1. Read the story carefully, and be able to tell the whole of it in your own words.
- 2. Be able to explain the following:—handsome, intelligent, tenaciously, peculiar, stubbornly, the would-be murderer, conspired, scheme.
- 3. Suppose the dog could have spoken; write down what you think he would have said, when the groom came to chain him up.

4. Put the coachman's confession in his own words. Begin in this way:—

The coachman confessed afterwards, and said, "I knew that my master had a large sum of money . . .

½ Unit.

- 1. Learn how to spell all the words in the last paragraph, beginning, "The mastiff."
- 2. Write out the following in your best hand writing: -

This story of the mastiff shows the ability of some dogs to understand human speech.

1. Unit.

Read carefully through the piece, and then be ready to answer the following:—

- (a) What is the length of a full grown whale? Measure the distance of strides.
- (b) In what ways is a whale different from a fish?
- \cdot (c) How does a whale feed?
- (d) What helps him to float?
- (e) What does he do, when he wishes to sink?
- (f) Why does he rise to the surface?
- (g) Describe the uses of the whale's blow-hole.
- (h) Why is the blow-hole closed under water?
- 2. Explain these words:—Scales (what other meaning has this word?), jolly-boat, distinctly, stunned.
- 3. Write down the names of as many creatures living in the sea, as occur to you.
- 4. Learn how to spell all the words in the last paragraph, beginning, "As soon as he dives."

$\frac{1}{2}$ Unit.

Make references and enquiries, with a view to finding out why a cork floats on water, and a pen-knife sinks.

Additional English.

Class X. May 1926—1st Week. Text Book: Smiles' Self Help. India in Song.

1st Week:—Rhetoric.

1st Unit.

- 1. Explain and illustrate by examples:—
 Pleonasm; periphrasis; tautology; circumlocution.
- 2. Name the different kinds of diffuseness in the following: -
 - (a) It was the privilege and birthright of every citizen and poet to rail aloud and in public.

- (b) They returned back again to the same city from whence they came forth.
- (c) Cromwell left behind him a name not to be extinguished but with the whole world.
- 3. Express the sentences in q. 2 omitting all superfluous words and expressions.

2nd Unit: -Smiles' Self-Help-Chapter I, 5 pages.

- N.B.—Read the whole chapter several times before attempting to answer the following questions:—
 - 1. "Heaven helps those who help themselves." Explain the maxim and illustrate it by an example from your own life.
 - 2. Why is the worth of a state dependent on the worth of the individuals composing it? What is your duty in this respect?
 - 3. Give the substance of paragraph 4th (National progress, etc.).
 - 3rd Unit: —Composition and General knowledge:
 - 1. What do you know of the recent Calcutta riots? What were the causes of this outbreak?

Can you give any suggestions to prevent these riots in future?

2. Distinguish between:

Disappointed of and disappointed in, to go to school and to go to the school; he did not do half his work and he did not half do his work; a doctor's gown and cap and a doctor's gown and a cap.

ENGLISH.

Class X. May 1926—1st and 2nd Weeks. Text Book: Calcutta University Selections.

1st Week.

1st Unit: -Physical Courage-paragraphs 21 to 24.

1. Explain the following phrases and use them in sentences of vour own:—

Unnatural cruelty; loyalty to duty and forgetfulness of self; voluntary submission; call of duty and reflected glory.

- 2. Give the causes that stimulate physical courage.
- 3. "Our share in these deeds must not end in the reading."
 What does the writer expect you to do when he makes this remark?
- 4. What is, according to the author, most shameful and what is most desirable?

2nd Unit: -Moral Courage-Mottoes and paragraphs 1-2.

- You have read 'Physical Courage.' Now you are going to read 'Moral Courage' of the same author. Before beginning to read the piece think out what sort of courage should be called 'Moral Courage.' Then go through the whole piece several times and see whether you have been able to anticipate the writer even in some respects.
- 1. Distinguish between Physical Courage and Moral Courage.
- 2. Give the meanings of the following words and phrases and frame sentences with them: Sinews of goodness; highwater mark; braces; inspires with fortitude.
- Q. What is meant by 'Sinews of War'?
- 3. Explain the mottoes fully:
- 3rd Unit:—Poetry—Elegy—Stanzas 13 to 15.
 - 1. Turn into prose order all these stanzas.
 - 2. Parse 'unroll (13) Waste (14) 'and 'that' (st. 15).
 - 3. Explain—spoils of time; dauntless breast; inglorious Milton.
 - 4. What is the leading idea of these stanzas?
 - 5. What do you know of Hampden, Milton and Cromwell?

2nd Week.

- .st Unit: Moral Courage-paragraphs 3, 4, 5 and 6.
- 1. How does the author define 'Moral Courage'?
- 2. Show how moral courage is superior to physical courage?
- 3. Whom can you call 'almost a perfect man'?
- 4. Give the antonyms of the following:—
 approve; noble; accept; consent; rough.
- 2nd Unit: -- Moral courage -- paragraphs 7, 8 and 9.
 - 1. How do people generally, and young people particularly, look upon moral courage, and why?
 - 2. In what does the nobility of Ram and of Arjun consist?
 - ?. What do you know of Galileo? What does his life teach you?
 - 4. Give the meanings of the following and frame sentences with them:
 - overvalue; unflinchingly; depreciate; suppleness of limb; objects of ridicule; accord with; heretical.
- 5. Can you give an example of Moral courage from your own life?
- 3rd Unit:—Poetry Elegy—stanzas 16 to 19.
 - 1. Turn into prose order stanzas 16, 17 and 18.
 - 2. Give the leading idea of these 3 stanzas.
 - 3. Cite an instance from Indian History to illustrate the following:—"Wade through slaughter to a throne."

- 4. Explain the following: -
 - (a) Applause of listening senates.
 - (b) Struggling pangs of conscious truth.
 - (c) to Quench the blushes of ingenuous shame.
 - (d) Muse's flame.
 - (e) The noiseless tenor of their way.
- 5. Distinguish between command and commend; ingenous and ingenious.

GEOGRAPHY.

Class VII. May 1926.

1st Week.

- 1. (a) How does a mountain help rainfall and a desert prevent it?
- (b) What makes the Western portion of the Deccan have lower temperature than the eastern in summer?
- 2. The Deccan lies in the Torrid Zone but its temperature is not very high; What is the cause of that?
 - 3. Name the Provinces which are outside the monsoon region.

2nd Week.

1. Classify the people of India and their languages in a form shown below and learn them:—

Family or stock: Races of people: Provinces: Languages spoken: inhabited.

2. What is the total population of India? Draw a population map of India. Name the places that have the densest population and that have the least and account for such a difference.

(page 126.)

3. In form given below write notes on the religions in India and learn them:—(page 127).

Religion: People who practise it:

3rd Week.

- 1. What is the main occupation of the people of India? What does that depend upon? How is cultivation carried on in places where rainfall is deficient?
- 2. Write notes on the agricultural products in a form shown below and learn them:—(pages 128 to 132).

Products: Regions where they grow: Condition of the soil or Climate.

3. Draw maps showing the chief products. (Two maps to be drawn and some of the products to be shown on each map) page 131.

4th Week.

1. Write notes in a form shown below on the mineral products and learn them:—

Minerals: Where found: Chief Centres:—(page 132).

- 2. Draw a map to show the areas where the chief minerals are found in abundance (page 131).
- 3. In a form below write notes on the important manufactures and learn them:—

Agricultural products: Where manufactured:

GEOGRAPHY.

Class VIII. May 1926.

1st Week.

- 1. What is the condition of the Climate of the British Isles? Explain clearly the causes that affect their climate.
- 2. What portions of the British Isles have the most agricultural products? Name the important timbers and crops.
- 3. Name the chief fishing stations, and the chief centres of different minerals.

2nd Week.

- 1-2. Name and find the centres of the different manufactures of Great Britain and Ireland.
- 3. What are the chief exports and imports of Great Britain? What does the nature of these exports and imports indicate? 3rd Week.
- 1. Name the chief sea ports of Great Britain and find their positions.
 - 2. (a) What are the chief means of communication?
- (b) Explain briefly the form of Government of the United Kingdom.
 - 3. (a) Name the races from which the people of Britain descend.
- (b) Compare the population of the British Isle's with that of India.
- (c) $\frac{3}{4}$ of the people of Britain and only $\frac{1}{10}$ of that of India live in towns; how do you account for it?

4th Week.

- 1. Name some of the largest towns and find their positions.
- 2-3. Name and find the positions of the chief possessions of Britain in the world.

Practical Exercises.

1st Week.

- 1-2. Draw an annual rainfall map of the British Isles put in arrows to show the directions of winds.
- 3. Name on the back of the map the regions of heavy and low rainfall. State reasons for the difference.

2nd Week.

- 1-2. Draw a vegetation map of the British Isles and show therein the chief coal fields and some of the most important manufacturing towns.
- 3. Write notes on the back of the map explaining the vegetation regions, coal fields, and connection of the manufacturing towns with the coal fields.

3rd Week.

1-3. Draw a simple political map of the British Isles and show therein the positions of the important rivers and the chief towns as far as possible. All the writing in the map should be in print type.

4th Week.

- 1-2. Copy the map on p. 269.
- 3. Examination.

Text Book History of India for Junior classes by E. Marsden.

HISTORY.

Class VIII. March 1926. 1st and 2nd weeks:

1st Week: Indian History, Chapters 42, 43 and 44.

1st Unit:

Q. 1. Give an account of the third Carnatic War or describe the struggles between the English and the French for supremacy in Southern India from 1744—1763. What was the result of that long struggle?

2nd Unit:

- Q. 2. What do you know of Mirjafar? Who became the Nawab of Bengal after Mirjafar?
- Q. 3. What led to the struggle between Mirkasim and the English? Give an account of it.

3rd Unit:

Q. 4. Draw a map of India to illustrate the three Carnatic wars.

2nd Week: Reading lesson—Chapter 45.

1st Unit:

- Q. 1. When and between whom was the treaty of Allahabad concluded? What were the terms of the treaty?
- Q. 2. Give an account of the career of Robert Clive in India?

2nd Unit:

- Q. 3. Write what you know of Clive's reforms.
- Q. 4. What do you mean by the Dewani? When was the Dewani of Bengal, Behar and Orissa granted to the East India Company?

3rd Unit:

Q. 5. Draw a map of British India after Clive.

April 1926. 3rd Week.

3rd Week: Reading lessons 51-53.

1st Unit:

Q. 1. How long was Warren Hastings Governor General of India? Why was the Regulating Act passed? What were the changes introduced into the affairs of the E. I. Co. by the Regulating Act? What difficulties had Hastings had with his new council? Who was Nandakumar? Why was he hanged? What two wars did Hastings make when he was Governor General.

2nd Unit:

Q. 2. Give a short account of the First Maharatha War. What did the English gain by this war? Write a note on the Treaty of Salbye.

3rd Unit:

Q. 3. What led to the 2nd Mysore War? How and when was it concluded?

GEOMETRY.

Class VII. April 1926. Text Book: A School Geometry by Hall & Stevens.

1st Week:

- 1. (a) Define Perimeter, Vertex, hypotenuse, median, and
 - (b) explain the following terms: Equilateral, equiangular, regular.
- 2. Name the different triangles with diagrams of each of them.

3. Into how many parts can a triangle be divided? When are two triangles said to be equal in all respects? (Look up p. 17.)

2nd Week:

- 1. Learn Theorem 4 and write it out using different letters. (1 unit.)
- 2. Do Exercises on p. 19. (2 units.,

3rd Week:

- 1. Learn Theorems 5 & 6, and hence prove that if a triangle is equilateral it is also equiangular and the vice versa.

 (1 unit.)
- 2. Of how many clauses does the enunciation of a theorem consist, and what are they? What do you understand by an 'axis of symmetry' and an 'indirect method of proof'? (1 unit.)
- 3. Work out Exercises on p. 21. (1 unit.)

4th Week:

- 1. Enunciate and prove theorem 7. (1 unit.)
- 2. Note that the two triangles are equiangular to one another when the three sides of the one are severally equal to the three sides of the other. Show also by a diagram that the converse is not necessarily true. (See p. 25.) (2 units.)

GEOMETRY.

Class VIII. March 1926—3rd and 4th Weeks. Text Book: A School Geometry by Hall & Stevens.

3rd Week: Theorem 17 and 18.

- 1. (1) From the enunciation of each of these two theorems, find out the hypothesis and conclusion.
- (2) State the necessary conditions on which two triangles are to be proved identically equal. (1 unit.)
- 2. (1) Why is not Theorem 18 classified along with Theorems, 4, 7 and 17?
 - (2) State the properties of a triangle relating to: -
 - (a) The sum of its interior angles.
 - (b) The sum of its exterior angles. (1 unit.)
- 3. Enunciate two theorems in which from data relating to the sides, a conclusion is drawn relating to the angles. (1 unit.)

4th Week:

- 1. (1) How can you show that in the classification of triangles with regard to angles Theorem 16 is assumed?
- (2) Enunciate two theorems in which from data relating to angles, a conclusion is drawn relating to sides. (1 unit.)
- 2. (1) What is a parallelogram? Show the "Squares", "rectangles" and "rhombuses" are also parallelograms.
 - (2) Learn the proof of the theorem 20. (1 unit.)
 - 3. What conclusion do you arrive at:
 - (a) if two sides together be equal to the third.
 - (b) if the sum of any two is less than the third. (1 unit.)

ALGEBRA.

Class VII. April 1926. Text Book: Matriculation Algebra by K. P. Basu.

Exercises 4-8.

1st Week:

- 1. Learn the names of the different pairs of brackets. (Look up p. 13.)
- 2. Illustrate by examples a binomial and a multinomial expression, and show the difference between \sqrt{ab} and \sqrt{ab} .
- 3. Go through the examples given on pages 13 and 14, and do Exercise (4).

2nd Week:

- 1. Explain a like and an unlike term, and also a homogenous expression.
- 2. What do you understand by a positive and a negative quantity? Illustrate your answer with examples.
 - 3. Work out Exercise (5).

3rd Week:

- 1. Note that the sum is positive or negative as the quantities added together are either positive or negative. (1 unit.)
- 2. Read carefully the examples given and work out Exercise (6). (2 units).

4th Week:

- 1. Learn the rule for adding positive and negative quantities. (Look up p. 26.)
 - 2. Work out Exercise (7).
 - 3. Do Exercise (8).

ALGEBRA.

Class VIII. March 1926—1st and 2nd Weeks: Text Book: Matriculation Algebra by K. P. Basu.

1st Week: Formulæ and their applications:—

- 1. (1) Explain the statement, "A formula is the most general expression for any theorem respecting numerical quantities".
- (2) What is the general rule of finding the square of an Algebrical expression?
- (3) How much will you add to or subtract from each of the following sums in order to make it a perfect square:—
 - (a) $a^2 12ab$
 - (b) $4x^2 + 9y^2$
 - (c) $16m^2 + 8m$.
 - (d) 1 2mn.
 - (e) 25 + 100x

(1 unit).

2. Work out all the sums of Exercises 22 and 23. (2 units.)

2nd Week:

- 1. (1) The Square of the sum of difference of two numbers is equivalent to the square of the 1st number with twice the product of those two numbers plus the square of the second number.
 - (2) The Symbolical Expression of the above truth is:—

$$(a+b)^2 = a^2 + 2ab + b^2$$
.

- (3) The Square of any quantity either positive or negative isalways positive.
 - (4) Prove the following:—
 - (a) $a^2 + b^2 = (a + b)^2 2ab$; or $(a b)^2 + 2ab$.
 - (b) $a^2 b^2 = (a + b) (a b)$.
- 2. (a) When an expression is the product of two or more expressions, each of the latter is called a factor of the former.

Explain this by Examples.

- (b) What is an Elementary factor? (1 unit.)
- 3. Work out all the sums of Exercise 24. (1 unit.)

ALGEBRA:

Class X. May 1926. Text Book: Matriculation Algebra by K. P. Basu.

1st Week: Ratio and Proportion.

- I. Read article 1.
 - (1) From the definition of "the ratio of two quantities" mark: that (a) the two quantities must be of the same kind, (b)

the ratio is always an abstract number, tractional or integral

- (2) Mark the following: -
 - (a) Terms of a ratio.
 - (b) Ratio of less inequality.
 - (c) Ratio of greater inequality.
 - (d) Ratio of equality.
 - (e) Inverse ratio.
- II. Prove that a ratio of less inequality is increased and a ratio of greater inequality is diminished by adding the same number to both its terms. Give a concrete example.
 - III. What do you understand by the following:
 - (1) Compound Ratio.
 - (2) Duplicate Ratio.
 - (3) Triplicate Ratio.
 - (4) Subduplicate Ratio.
 - (5) Subtriplicate Ratio.

2nd Week:

- (1) Exercise 93. Go through the examples worked out in the book.
 - (2) Nos. 1, 2, 4, 6—10.
 - (3) Nos. 11-20.

3rd Week:

- I. (a) When are four quantities said to be proportionals?
 - (b) Note the following:—
 - (1) Extremes and means of a proportion.
 - (2) Fourth perpertional, third proportional, mean proportional, continued proportion.
- II. (a) Prove that the product of the extremes is equal to the product of the means. This is 'the greatest truth' of proportion, for, by the application of this, we can find the fourth term of a proportion when the other three are given.
 - (b) Exercise 94. Nos. 1-10.
 - III. (a) If a:b::b:c. prove that $a:c::a^2:b^2$.
- (b) Prove the operations Invertendo, Alternando, Componendo, Dividendo, Componendo and Dividendo.

4th Week: Exercise 95.

- (1) Nos. 1—5.
- (2) Nos. 8, 9, 10.
- (3) Nos. 12, 13, 15.

The story of the introduction of the Dalton Method in the Shillong Government High School is the story of a development towards the Dalton ideal as experience has led us on. No attempt has been made to force the pace or to force the teachers to adopt methods of which they disapproved. The enthusiasm of the teachers and their appreciation of the spirit of the Method are essentials without which very little is possible. Gradually we have moved forward as the need for improvement and better methods suggested themselves and though we still have a considerable way to go before the Dalton Method, in all its purity, is completely followed—if such a day will ever come—we are satisfied that we have found a method the educational value of which is of the highest. None of the teachers now desires a return to the old method of class-teaching. endeavour, rather, is to turn even the periods devoted to class-teaching into something more of the nature of conferences of teacher and pupil, and to be guides and helpers of their pupils in those very things which they find difficult.

To sum up, among the main benefits we have derived from the Dalton Method the following are worthy of consideration:—

- 1. It demands from the teachers careful and thorough preparation in advance, otherwise it will be impossible to produce such assignments as are required.
- 2. It does away with a great deal of the evils arising in Indian schools from breaks in the school course due to holidays and leave. The work set out for the month is expected to be done whatever interruptions may come.
- 3. It has helped to solve the problem of discipline. When boys gather by choice in a Subject Laboratory, to study a subject they feel they need help in and in which there is an expert capable of helping them just when and where they need help, there is produced an atmosphere of study and unwillingness to suffer interruption.
- 4. The boys are given a new motive for study.
- 5. The boys are gradually taught the use of liberty.
- 6. Boys strong in some subject and weak in others are able to devote more time to their weak subjects.
- 7. The relationship between pupils and teachers is changed.
- 8. Far more work and better work is being done.

REPORT ON THE WORKING OF THE DALTON PLAN IN THE ARMENITOLA HIGH SCHOOL, DACCA.

The Dalton Plan was introduced into the four top classes of this school at the beginning of the session of 1925. The subjects brought under the plan were English, Bengali, Mathematics, History, Geography and Optionals. The optional subjects are Sanskrit, Arabic, Hygiene and Additional Mathematics. A candidate for the High School Examination can choose one from among these to complete his number of subjects.

The morning was devoted to English, Mathematics and Bengali; the afternoon to History, Geography and Optional. The last hour of the day was reserved for special lessons if necessary as well as for Drawing and Drill (see time-table).

The contracts were made out for a month and contained 160 units of work. The unit of work adopted was as much as a boy of average ability could accomplish in a class period, that is about 45 minutes. The unit for mathematics, however, was different. It was as much as a boy of average capacity could perform in an hour. The number of units in the various subjects were:—

English .			•				60
Bengali			•	•			20
Mathematic	es	•		•			20
History .	•			•			20
Geography						•	20
Optional	•			•		•	20
							 160

English comprised Prose, Poetry, Essay Writing, Translation and Re-translation and Grammar. Mathematics comprised Arithmetic, Algebra and Geometry.

The distribution of the units was based on the difficulty of the subject, its importance in the Examination, and the amount of time devoted to it in class before the Dalton Plan was introduced.

There was no special Home Work or preparation. The contracts were so made as to include about 2 hours' work out of class daily.

The work of the students was checked and recorded by means of graphs. When a student had finished a unit or units of work in any subject he took it to the instructor who tested him on the work submitted, and if satisfied initialled on the contract the units finished. The number of units done in a day was entered on a subject-graph kept by the instructor. A student's general progress was recorded by another graph (class-graph) which showed the progress of each pupil in all subjects combined. This graph was kept by the

Head Master who saw at a glance the general progress of each pupil (Specimens of contract, subject-graph and class-graph attached).

Application.

Every teacher knows how difficult it is to get pupils to work steadily and regularly. A great number of pupils believe that it is waste of labour to study in the early part of the session. They imagine that everything they learn will be forgotten and must be done again immediately before the examination. There is also the idea that the year is long and a little extra labour towards the end will make them all right. Hence most of them go through the course in a perfunctory and unsatisfactory manner. They never try to retain what they learn, trusting to a few weeks intensive study when the examination comes in sight. They study solely for the examination, and forget most of what they have read directly that ordeal is over.

A great deal of this slackness is due also to sheer laziness. Many parents, too, take little interest in the progress of their children. Some are even quite content to have their sons at school, caring little, whether they work or not. To them it is sufficient honour to have their sons study in a High School.

This disinclination to steady and regular work was considerably less this year than in previous sessions. Though many students could be got to work only against arrears, the majority worked regularly all the year round and at the end of the year only three pupils out of about 120 failed to complete the course, and these in one subject only.

A great incentive to regular work was the graphs. In class a boy can neglect his work without attracting much notice, and it is impossible to convince him of unsatisfactory application. In the Dalton Plan his neglect is glaring.

A shirker can of course still shirk, but he is alone and he becomes conspicuous. If he falls too far behind he becomes an object of quiet amusement to the other students. This he cannot endure for long. He ends in either working or leaving school.

It is only just, however, to state that many boys are heavily handicapped in the prosecution of their studies, especially in this school which is situated in a poor locality. A great number have illiterate parents and poor homes. Such pupils cannot compete with the children of professors, doctors, munsiffs, etc., who live in a cultured environment. This fact accounts for the amazing difference in intelligence and ability that is found among the students of the same class in High Schools in Bengal. There were several students in school who I knew worked as much as twelve hours a day throughout the year and yet, owing to this handicap were unable to progress satisfactorily.

Another sign of the improvement in application was the fact that when a half-holiday was given, the students of the Dalton Classes were not keen to avail themselves of it. Many remained on till the

usual closing hour. In the evenings also there was no hurry to leave and many worked on long after the closing hour.

There is, therefore, no doubt but the Dalton Plan encourages the development of steadiness and persevering labour.

Home-Work.

There is no part of a teacher's duty so unpleasant as that relating to home-work. A teacher in any of the top classes has generally between 60 and 100 exercises to examine daily which may occupy three or four hours of his time out of class. Many of these khatas are so carelessly and slovenly done that it is almost impossible to correct them, and nearly all need the presence of the pupils at the time of correction, if any benefit is to be obtained. When the exercises are returned the pupils never look over their corrections unless compelled to do so. There is, therefore, practically, no return for all this labour.

Firmness on the part of a teacher in this matter leads to unpleasantness. The teacher becomes unpopular, little conspiracies are formed to give him as much annoyance as possible, and sometimes anonymous letters are written to the Head Master. Quite apart from this, firmness is of little avail, for shirkers can always evade the consequences of neglect of home-work by remaining absent a day or two, or longer if necessary.

Something has to be said perhaps from the pupils' point of view. A boy who fails to do his home-work through no fault of his own receives no consideration. It is always assumed that he is shirking and is liable to a scolding or punishment. It is almost necessary to accept no excuse for the omission, or omission would become very general. There is also the likelihood of pupils' getting too much home-work. Each teacher who visits a class gives what he thinks is a reasonable task. The total may be beyond the pupils' capacity. The result of this is total neglect, or the whole task carelessly and slovenly done, or the task of an exacting teacher performed and the rest neglected.

No definite work was set to be done at home in the Dalton Plan, it was included in the contracts; several times during the year we called in the various classes to ascertain the manner in which they The replies to our inquiries were frank and worked out of class. truthful, and more or less what we had expected. We discovered that when pupils felt inclined or when circumstances were favourable good work was done. Sometimes the pupils worked up till quite a late hour at night. At others they retired early or omitted study altogether. Headache, fatigue after a big game, illness of a member of the family, attendance at a wedding, necessity of escorting a lady of the family on a visit—these were given as reasons for the curtailment or omission of work at home. We felt convinced from these discussions that the pupils worked regularly and honestly and the quality of the work was good because done willingly. think is one of the advantages of the Dalton Plan. If for any reaof work, he can always make up the shortage on another, or on a holiday. All the unpleasantness and difficulties connected with home-work disappear and both teachers and pupils are the happier for it. Cases have come to our notice where students worked all day on Sunday to make up for a day's absence.

Teachers' Work.

The plan has increased the work of the instructors during school hours. But they have got rid of the useless drudgery of examining exercises out of class. These are not examined in the presence of the pupils. Of the eight teachers connected with the plan, 6 are engaged from 10-45 to 4-15, with half an hour's break at the recess. The others remain in their laboratories for about $2\frac{1}{2}$ hours. The work of a teacher out of class now consists in the preparation of contracts and the maintenance of the various graphs. The contracts are very important and great thought and labour are essential to their proper getting out. The teachers working the plan here prefer it, notwithstanding the extra work it entails for the simple reason that all the unpleasantness and worries accompanying the teaching of a class no longer exist.

Conduct.

Usually faults of a grave nature are rarely committed in school. Indirect disobedience, shirking, talking and inattention in class, lies of excuse, abusive language, and fits of temper—these are the offences most frequently committed. Though they are not serious they may often develop into serious incidents and have often done so with inexperienced teachers. Such faults practically disappeared from the Dalton classes, the fact being that there was no necessity or temptation to commit them. The teachers and students worked in a friendly spirit and there was no unpleasantness of any kind.

Absentees' Work.

In a school of 12 teachers it may be assumed that for 100 days in the year work is carried on with one member of the staff short. This is more serious than it appears and causes much disturbance and derangement. If an absentee's work was confined to one class only, the matter would be simple. But teachers as a rule visit more than one class. The class cannot be left to itself in the absence of the teacher; neither can it be dismissed. A member of the staff has to take charge of it. This puts extra work on one who has already enough to do, while the class gains little or nothing.

This difficulty has completely vanished. When a teacher is absent the students are notified and advised not to attend his laboratory unless they have work that does not require his help. Those who cannot work without him should concentrate on other subjects for that day. Work, therefore, goes on almost as usual even in the absentee's laboratory.

Progress.

The average percentage of marks obtained by the classes in each subject for the last five years was worked out, and compared with the percentages obtained at the Annual Examination at the end of 1925. The results were as follows:—

	Ave	rage	for	5 yea	lrs.		Average 1925.
	,	8-		- ,,		ass X.	
English					•	39.9	41.0
Mathematic	cs					47.8	$35 \cdot 1$
Bengali						47.9	54.0
History						38.0	37.9
Geography						43.8	42.0
Optional						46.0	49.0
•				•	_		
					(Class IX	
English	•	•		•	•	38.6	$42 \cdot 4$
Mathematic	cs	•		•	•	38.3	49.2
Bengali	•		•	•	•	45.5	53.0
History				•	. •	41.8	. 46∙3
Geography				•	•	40.5	49.0
Optional	•	•		•	•	47.0	53.2
					C	LASS VII	II.
English						43.5	49.1
Bengali						43.7	45.1
Mathemati	cs					40.7	$36 \cdot 6$
History				•		42.6	47.7
Geograpy						43.6	45.5
Classics				•	•	39.9	38.5
						()	rĭ
						CLASS VI	
English	•	•		•	•	44.7	47.5
Bengali	•	•		•	•	40.8	52.7
Mathemati	c	•		•	. •	45.6	44.8
History	•	•	•	•	•	39.3	38· 4
Geography		•		•	•	45.4	46.2
Classics	•	•	•	•	•	48·8	38.5

Note.

1. Class X.—Weak, especially in Mathematics. Were unable to complete mathematics contracts; contracts had to be made easier.

- 2. Class IX.—Above the average. Worked the Dalton Plan as single class in 1924.
- 3. Do. VIII .- Weak all round.
- 4. Do. VII.—A class of average ability.

'Arranged according to subject, the percentages were-

	Arrangea	ace	coraing	to	subject,	the	percentages	were-
					English.			
Class	\mathbf{X}	•	•	, ′	. 8	9.9		41.0
,,	IX	•	•		. 3	88.6		42.4
,,	VIII	•			. 4	13.5		4 9·1
,,,	VII	•	•	•	. 4	4.7		47.5
					Bengali.			
,,	\mathbf{X}		•		. 4	17.9		54.0
,,	IX	•	•		. 4	15.5		53.0
,,	VIII		•		. 4	13.7		4 5·1
,,	VII	•	•	•	. 4	8.01		52.7
				M	athemati	cs.		
,,	\mathbf{X}		•		. 4	17.8		35 1
,,	IX		•	•	. 3	8.3		49.2
,,	VIII		•		. 4	10.7		36-6
,,	VII	•	•		. 4	5.6		44.8
•					History.			
,,	\mathbf{X}	•	•		. 3	8.0		37.9
,,	IX		•	•	. 4	1.8		46.3
,,	VIII		•	•	. 4	12.6		47.7
,,	VII	•	•	•	. 3	39·3	•	38.4
				(deograph	y.		
,,	${f X}$		•		. 4	13∙8		42 ·0
"	IX	•	•		. 4	10.5		49 ·0
,,	VIII	•	•			[3.6		4 5·5
,,	VII	•	•	•	. 4	15.4		46.2
					Optional	•		
,,	\mathbf{X}	•	•			16.0		49.0
,,	\mathbf{IX}	•	•	•	. 4	! 7∙0		53.2
					Classics.			
•	VIII		•			39.9		38.7
**	VII		•		. 4	1.8	·	38.5

English and Bengali show a decided improvement. In the case of Bengali there is perhaps no cause for surprise. But it is otherwise with English. Most teachers and Head Masters who have discussed the plan with me were of opinion that English could not be taught by this method. If, however, the method of teaching English in class is considered, it will be obvious that it has serious defects. In every branch of the subject the teacher devotes practically all the time to explanation, the students getting little or no practice. The Dalton Plan is almost the reverse of this.

The results in Mathematics has been an equal surprise. With the exception of Class IX the percentage in every class is below the average. It was generally believed that this subject lent itself to the Dalton System more than any other subject; yet the results here seem to point to the contrary. English and Bengali, of course, depend to a great extent on memory work while mathematics needs reasoning, and it may be that the power of memory is more developed in Bengali students than the reasoning faculty.

History was formerly an optional subject, hence only those boys who had a taste for it took it as a subject in the final examination. It was made a compulsory subject in 1925 and every student has now to appear in it.

Classics was compulsory till 1924. It is now optional. The practice in this school is to compel every student in VII and VIII to study the subject. When they come to Class IX, they are at liberty to drop it in favour of another subject. The tendency is to drop classics. The following figures show the number of students who appeared in classics since it was made optional.

1924	•	•	•	•	•	•	•	•	6
1925	•	•		•	•	•	•	•	5
1926	•		_	_	_			_	2

This accounts for the difference in the average percentages.

The optionals are Additional Mathematics, Hygiene, Sanskrit and Arabic. The course in these is a two years' course, and students make their choice when they arrive in Class IX.

A single class on the Dalton Plan.

At the suggestion of Mr. West, the Principal of the Teachers' Training College, one of the junior classes was worked as a single class on the plan. In this case one teacher had charge of all the subjects, and the same room was used throughout the day, the pupils not leaving it. In every other respect it was the same. That is, there was no set time-table and the pupils studied each subject as they felt inclined.

The class was started by a research student of the Training College who conducted it for four months. After the summer vacation (June) a member of the staff took over the class.

The results of this class were much better than anticipated. It was believed that the children, being so young,—the average age of the class was $8\frac{1}{2}$ years—would not make the same progress as if taught by the usual class method. The results however proved the contrary as the following will show:—

$\mathbf{English}$			•	46.5	64.5
Mathematic	s	•	•	49.7	$53 \cdot 3$
Bengali			•	50.3	58-7
History			•	$51 \cdot 1$	$56 \cdot 4$
Geography				51.8	$52 \cdot 1$

I believe the difference is the result of application and the steady working of the whole course. In the junior classes breaks through absence retarded a boy's progress to a greater extent than it does in the senior classes.

This class has done so well that I have allowed them to continue the plan this year also in Class V under the same instructor.

Attendance.

There was a slight improvement in the attendance also. The average daily percentage of attendance for the four classes working the Dalton Plan was 86.5 while for 1924 for the same classes the attendance was 83.3.

					I		ı
X .	·	M Tu W Th F	} DALTON WORK	IN	DALTON W	ORK IN	RESERVE
I X .		M Tu W Th F	ENGLISH MATE	IEMATICS	history ge	ЮGRАРНҰ	FOR
VIII	,	M Tu W Th F	AND	•	E AN	D	LESSONS
VII .	·	M Tu W Th F	BENGALI		ADDITIONAL	SUBJECTS	AND DRIL
VI.∙		M Tu W Th F	23 23 27 27 29 29 29 29 29 29 29 29 29 29 29 29 29	B. Text. P. B. B. " " " B. Gram. " B. Essay. "	E. B. to E. M. S. R. ,, E. to B. ,, E. to B. ,, Essay. ,, B. to E. ,, Comp. ,, ""	Drill. Drawing. Drill. History A. M.	History A. M. Geogr. ,, ,, ,, ,, Drawing.
v .		M Tu W Th F	,, Comp. ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	E. Text. P. C. C. " " " " " " E. Text. P. C. C.	Drill. Geogr. P. C. C. Drill. Geogr. P. C. C. ,, ,,	B. Text. B. B. K. " " " " Gram. " " Kssay. "	History B. B. "" "" Drawing. ""
IV .		M Tu W Th F	DALT	Drawing. ON WORK SINGI	LE CLASS Drill.	Drill.	
III .		M Tu W Th F	,, Gram. ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	Geogr. I. Ali. Drawing. Geogr. I. Ali. Drawing Drill.	E. E. to B. I. Ali. "B. to E. " "Comp. " "Writing.	E. Text. I. Ali. Drill. E. Text. I. Ali. """" """""""""""""""""""""""""""""	

CLASS VII.—HISTORY.

Assignment—March (192).

Subject.	Item.	Matter.	Units.	Signature.
		You have seen how the early Hindus becoming dissatisfied with the Hindu religion adopted Jainism (58) and Budhism (57). Some dynasties followed the Hindu religion while others were Budhists. Budhists monks and kings preached their religion to all parts of the then known world (58) and for some centuries it had great influence over the people of India; yet it had to yield again to Hinduism, which with the help of the religious reformers (99) of the time gradually regained its influence on the people (97). From this time the history of India is the history of Hinduism as we know it to-day. Has there been any more change in the religion? Have you heard of any religious reformer of the modern times?	21	
		You have now reached the final stage of the First period (Hindu) of Indian History. So much is uncertain in this ancient period that only great movements and periods can be marked out. You will do well to recapitulate the names of the great dynasties and also the names of the noted kings along with their dates.	1½	
		After the death of Harshavardhan the whole of Northern India became split up (76) into a number of States (cf. ্ৰাক ইতিহাস 112—24). Learn the history of these states and also that of the states of Southern India (79). You will find that these states were not on good terms (80) with each other. Their jealousy and rivalry made them an easy prey to a foreign power. But this rivalry helped the growth of literature (95—96). From this time the history of India is mixed up with the history of the Mussalmans. Learn the life and teachings of Mahomed.	2	
		The kingdom of Gazni (81) was a source of danger to Hindusthan. Sabaktagin and his son Sultan Mahmud plundered India (81—83). The Hindu Rajahs of Northern India esp. Prithvi Raj and Joychandra could not unite (88—91) and so one by one (99) these kings were defeated by the Mussalmans. The Hindus of Southern India also suffered the same fate (86—7).	1	

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Sabject.	Item.	Matter.	Units.	Signature.
	-	Be prepared to answer the following:—		
	1	Narrate the story of Mahomed's life (74-75).	1/2	,
	2	What do you know of the conquest of Sindh by the Mussalmans?	$\frac{1}{2}$	
	3	Describe the different Hindu States of Northern India after the death of Harshavardhan.	$\frac{1}{2}$	
	4	What do you know about the rise of the Rajputs? Name the different classes of Rajputs (77).	1	
	5	What do you know of the Rastrakutas?	$\frac{1}{2}$	
	6	What do you know of Ghazni (80)? Why did Sabaktagin invade India?	$\frac{1}{2}$	
	7	Describe fully the invasions of Sultan Mahamad of Ghazni. What was the effect of his attacks? (cf. লোক হতিহাস pp. 127—137.)	2	
	8	Trace the history of different states of Southern India (87).	1	
	9	Describe the quarrel of Prithvi Raj and Joy Chand (cf. লোক ইতিহাস pp. 137—145). How did Prithvi Raj try to check the Mussalmans? Why did he fail? Describe the gradual steps by which the whole of Northern India was conquered by the Mussalmans (92).	2	
	10	Describe the character of Mahamed Ghori.	1/2	
,	11	Trace the changes in the Hindu religion of the pauranic age.	$2\frac{1}{2}$	
		Describe the life and teachings of the Hindu Reformers (99-100).		
	12	What do you know of Albaruni?	1/2	

ARMENITOLA GOVERNMENT HIGH ENGLISH SCHOOL, DACCA.

CLASS VII - MATHEMATICS.

Assignment III—March (192).

Subject.	Item.	Matter.	Units.	Signature.
Arithmetic .		FIRST PERIOD.		
		Topic: Fraction of Concrete Quantities.		
		The method has been clearly explained in the examples worked out in arts. 148 and 149 of S. K. Ganguly's Arithmetic.		
	1	Read arts. 148 and 149 of S. K. Ganguly's Arithmetic.	<u> 7</u>	
	2	Work out the alternate ones of the sums 37—65 of Ex. 110.	1	
Algebra • .		Topic: Addition.		
		Before you begin, read the Chapter on Positive and Negative quantities (page 16 of your book). For any help necessary you are to come to me in groups. Then you are to familiarise yourself with the following things which you will get in chapter III of your book (page 20).		
		(i) Addition of a positive and a negative quantity.	1	
	Ì	(ii) Subtraction of a positive quantity and a negative quantity.	1	
	1	Work out all the sums of Ex. XII.	1	
Geometry .	. 1	Work out Nos. 1, 2, 4, 5 of the exercises given in page 19 after Theo. 4.	2	
		Nor∎.—Problem টির অর্থ ভ'ল করিয়া ব্ঝিয়া লইয়া সুন্দর করিয়া figure আঁকিবে; তারপর যেই সব Proposition পড়িয়াছ তাহা ব্যবহার করিতে পার কিনা লক্ষ্য রাখিয়া কাম্ব আরম্ভ করিবে।		

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Subject.	Item.	Matter.	Units.	Signature
	1	SECOND PERIOD.		
rithmetic .		Topic: One Quantity as a fraction of another of the same kind.		•
	,	The method of procedure in the case of sums of this type has been explained in art. 150.		
	1	Read the section so that you may be able to work out sums of the above type.	1/2	
		NOTE.—To express one quantity as a decimal of another, first of all express the former as the vulgar fraction of the latter, and then reduce this vulgar fraction into a decimal.	,	
	2	Work out sums 1—10 of Ex. 111 (Ganguly's Arithmetic).	1	
lgebra	1	For the addition and subtraction of like and unlike terms read arts. 30 and 31.	1	
	2	Rules for the removal of brackets have been given in art. 32. Read the section so that you may apply these rules in the sums of the next example.	ł	
	3	Work out all the sums of Ex. XIV.	ı [
leometry	1	Read and prepare Theo. 5.	2	
		THIRD PERIOD.		
Arithmetic ,	1	Work out sums 11-32 of Ex. 111 (Ganguly's Arithmetic).	11/2	
Algebra	1	Work out sums 1—17 of Ex. XVI (S. C. Basu's book).	11/2	
		Note.—Addition করিবার সময় একই রকমের terms গুলি পর পর নীচে রাখিবে এবং like terms ও unlike terms-এর দিকে লক্ষ্যঠিক রাখিয়া যোগ করিবে।		
Geometry	1	Read and prepare Theo. 6.	2	
	1		l l	

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			FOURTH PERIOD.	
Arithmetic	•		For revision you will now take up Ex. 117 which contains many interesting sums.	
		1	Work out sums 1—10 of Ex. 117.	$1\frac{1}{2}$
Algebra .		1	Work out sums 18—27 of Ex. XVI.	13
Geometry .		1	Read and prepare Theo. 7.	11
			Note.—Theo. 4 এবং Theo. 7 এ প্ৰভেদ কি।	1
		ļ	Instruction.	
		į	(1) Directions as usual.	
			(2) Do co-operative work.	
]			

THE DALTON PLAN ADAPTED TO THE TEACHING OF PLURAL CLASSES IN A PRIMARY SCHOOL.

- 1. Introduction.—The principles of the Dalton Plan have been fully explained in the main body of this work. And it has also been shown how the Plan is working in Assam High Schools. The purpose of this article is to show how the Plan has been used and that with success, to solve one of the most perplexing problems of rural education.
- 2. The main problem of Primary Education.—The problem is stated simply; though it was after much groping in the dark, and with great labour and thought, that some solution was possible to be found.

Our villages are mostly scarce of population; so that the vast majority of village schools have an enrolment of from 30 to 40 pupils; and these pupils spread over the five years of a Primary School Course. Neither can this period be conveniently shortened; for even with this length of time in School, the Primary School Boy can hardly master all the rudiments of scholastic knowledge that is essential in the scheme of things in rural life.

And, the resources of the Local Bodies who control Primary Education are so limited that it is unthinkable for any reasonable time to come that they will be in a position to give more than one teacher for this number of scholars.

And, this one teacher—ill equipped and meagrely paid as he is—has got to face the problem of teaching five classes in a course of multifarious subjects.

Add to this: admissions throughout the year, irregular and unpunctual attendance, complexity of the Sanskritic alphabets and con-joined letters, want of accommodation and equipment in the school and it will not take long to be realised that the task of teaching a Primary School becomes almost a hopeless one.

- 3. The problems to be faced.—And it was to such a task that Mr. Cunningham, our Director of Public Instruction, set me to find a solution. So long ago as in 1917 he wrote:—
 - "Attention has been given to the important matter of training the teachers in the conduct of plural classes. This is a matter in which action has to move in advance of experience. * * * * The first thing to be done is to deal with the charge of two classes at a time. General principles in regard to the conduct of the classes and a suitable arrangement of the routine having been so arrived at by experience, the problem of the teacher who has to deal with three classes at a time may be considered. From this the School (that is, the Normal School) may proceed to deal with the most difficult question of all, that of a teacher who has to manage a complete school by himself, without any paid assistance."

(Note of Inspection on the Jorhat Normal School, dated the 24th July, 1917.)

And again, in the Quinquennial Review of Education for Assam for 1917-1922, Mr. Cunningham remarked as follows:—

"The task of teaching the simplest course is more than complex enough. Ordinarily the village school master, ill found in vitality and learning and depressed by poverty, is in sole charge of five classes or sections which he has to instruct in all the subjects of a varied course. There is no fixed date of admission. Pupils come in month by month according to caprice or the influence of their horoscopes. The lowest class, a class in which numbers are high, is a collection of little groups, each at a different stage of advancement. And there are four classes above this. * * * *

Again "with an attendance of 70 per cent. on the average, which sinks lower during seasons of flood and fever, the teacher is faced by a different selection of his pupils every day. Unpunctuality adds to his difficulties." (Page 61.)

And the Director suggested that in the training of teachers, "the text books are much less importance than the practising schools."

* * * The school must break from tradition in its own classes, getting clear away from the conventions of text books which presuppose one class, one teacher, a regular and punctual attendance, clocks in the school and the home and so forth." (Inspection Note, dated 8th August 1920.)

And he enjoined upon us in most serious words "to put ourselves in the teacher's place, to face his difficulties of ignorance and conservatism; of poor pay; indifferent health; poor quarters; poor equipment of the school, instead of the individual or class, as the unit; of large numbers and many classes; of admissions at all times of the year, and of unpunctual and irregular attendance in a timeless country side. So doing, we shall realise that Froebel and the rest can be but names to him." (Quinquennial Review.)

It was with such remorseless pressure in official reports and in private conversations that Mr. Cunningham squeezed out the little educational theory that I managed to gather in the Training College; and set my shoulders, like that of an unwilling bullock, to this work. And I had of course to muster as much grace as I could command, and put myself to it. I am now glad that I did so, and grateful to him that he drove me into it.

4. Two broad divisions of lessons.—It is evident, and had at once to be recognised, that a single teacher could not teach more than one class at one and the same time. It therefore follows that the boys must be left to themselves the greater part of the school-day to pick up such scraps of learning as they can manage. What the teacher can do, and must do, is a sort of general supervision. "That is, he is to be more or less a task-master."

The logical sequence was to divide every subject of study into two broad lines—namely, the portions in which direct teaching by the teacher is essential; and secondly, the ones in which the pupils can go on with the work with only occasional aid from the teacher. In the outcome we got a division of the school-lessons somewhat like what is given in the following statement:—

Names of subjects.	Lessons where teacher's attention is essential.	Lessons which the pupils can mostly learn by themselves.	
1. The alphabets, counting and writing in the Infant Class.	Teacher must teach the names of the alphabets, show the proper way of writing them, and teach counting with seeds, sticks, etc.	The beginners can practise the hand on letters engraved on wood. When some letters have been learnt, children can copy them with seeds	
2. Arithmetic	New rules are to be explained by the teacher always.	and afterward on slate. Examples on rules already learnt can be worked out by the boys themselves.	
3. Copy writing .	From Class II and above the teacher need only give the copy-slips, and supervise generally.	The boys do the writing by themselves.	
4. Dictation	In Classes II and III dictation is to be given by the teacher; and the correction is also to be made by him.	In class IV, a boy may dictate occasionally; correction can be left mostly to the children.	
5. Composition, letter writing, etc.	Teacher's teaching is neces-	But class IV boys may do a great lot by themselves.	
6. Tables	Only general supervision by the teacher is necessary; but he must correct when the boys finish writing.	Boys should recite them in common outside the school, and build them under teacher's directions.	
7. Mental Arithmetic	Teacher should set the pro- blems, and occasionally explain; also examine answers.	With a suitable book, a boy may often be asked to set problems to his fellows.	
8. Reading and Litera- ture.	For correction of reading, and explanation of difficult passages, teacher's presence in class is necessary.	Boys should do silent reading, find out difficult words, copy them; Class IV should be taught to make abstracts also.	
9. Geography	The Teacher should explain the terms, and teach-boys to draw and read maps.	After sometime, boys ean draw maps, find out places, and mark them.	
10. Drawing	Teacher should show correct way to draw, put copies on Black Board, and correct.	Boys may procure leaf and other specimen for drawing; and drawing is generally left to the boys themselves.	

Names of subjects.	Lessons where teacher's attention is essential.	Lessons which the pupils can mostly learn by themselves.	
11. General Knowledge	Teacher should supplement information gathered by boys; should also examine short descriptions written by boys.	Boys may collect things for study; should find out the qualities of such things; and write short descriptions.	
12. Hand work and gardening.	Only general guidance of the teacher is necessary.	Boys should do the work by themselves.	
13. Kasrat	Teacher's presence is always necessary.	Though a boy may be asked to command occasionally.	

5. Two sittings of the school.—From general consideration, it is apparent that the younger the pupil the more the teacher should pay heed to him. From the above division, this truth emerged with greater emphasis. It was at once seen that the lessons for the infants required constant attention from the teacher; and the higher the class the more could they be left to themselves.

But the infants had not enough work to engage them throughout the five-hours school-day; and from considerations of physical and mental development it was not desirable that they should have.

In our schools, however, the opposite is the rule. The higher the class the more attention and time the teacher pays to it. And even though the infants have only a little to do in the school, they have to sit out the whole day in expectation of some odd moments which the teacher may be able to spare from what he and his inspectors think to be more important works in the higher classes.

The result is that they spend most of the time doing nothing, and get tired and listless; and the atmosphere of the school, which should be cheerful and active, turns into dead and dull life-lessness for them. Is it to be wondered at, that in such circumstances, boys learn to dislike school and abhor school-learning, and their guardians get tired of sending children to school and take them away from it? Year after year, reports on Public Instruction have therefore to mourn that less than 50 per cent. of scholars get beyond the lowest infant class; which means that schooling had not the least effect on them, except possibly to teach them hating learning for ever in life.

This state of things had to go. But what were we to do? It was suggested that possibly the infants might be kept for only a part of the school-day in school. This appeared to be a reasonable thing to do. So the school-day, from 11 to 4, was divided into two sittings:—the morning sitting from 11 to $1\frac{1}{2}$; and after an interval of 30 minutes, the afternoon sitting from 2 to 4.

The infant classes are given all their lessons in the morning sitting, and at about $1\frac{1}{2}$ they are dismissed. The higher classes,

as far as practicable, are given for the morning sitting such lessons as they can be expected to do by themselves. (Vide statement given in paragraph 4.)

In the afternoon sitting there are only three classes; and about half the number of children, belonging to the lowest classes and mostly the noisy element, is eliminated. The teacher can now with comparative ease, take up these classes in such lessons as demand his more direct and careful attention. He gets less noise, less pupils, more space, and more steady attention; and all these make for more solid work.

This method is working completely satisfactorily in our practising schools; and we have always been able to promote the infants to higher classes after one year's teaching, and sometimes even in six or eight months.

After a careful examination of this system, Mr. Cunningham wrote on August 8th, 1920:—

- "The Practising Schools meet at 11. In School I, classes, IA and IB get particular attention in the early part of the day. At 1-40 the schools dismiss. Class I does not come back. For the rest of the day the master is free to attend, without distraction, to the upper classes. This is an excellent arrangement."
- 6. Principles for framing routine for the teaching of plural classes.—In other ways also we were satisfied that these simple innovations gave very good results. And as result of these experimentations, the following simple principles emerged, for framing routine for primary schools, with one, two, or three teachers; in fact whenever a single teacher may be required to take more than one class. These are:—
 - (i) Two school sittings.—The earlier sitting is to be for 2 to $2\frac{1}{2}$ hours. In this sitting the lowest two sections are given all their lessons, and are then dismissed; and the higher three classes work by themselves under general supervision of the teacher. The later sitting is for another 2 or $1\frac{1}{2}$ hours, when the higher classes are given the lessons requiring direct teaching.
 - (ii) Division of lessons into two groups.—All the school subjects may have two broad divisions of lessons: namely, lessons requiring direct teaching, and lessons requiring only general supervision from the teacher. The lessons have to be so arranged in the Routine that at any given time the teacher may have only one lesson requiring direct teaching.
 - (iii) Combination of classes.—For the above purpose, in many lessons, classes II and III, III and IV, and IA and IB may be combined. Lessons on General Knowledge, Geography, Story-telling, Letter-writing, Mental Arithmetic, Dictation, etc., will be found to be amenable to such treatment.

(iv) Broad division of school-day into four periods.—Ordinarily, in schools, the duration of class periods is for 45 or 50 minutes. And the Handbooks on School-Method prescribe 20 to 35 minutes for children. A discussion of merits or otherwise of such division of time is out of place here. What concerns us is that in an ordinary village Primary School to try to keep to such minute divisions of time is both impracticable and injurious. Impracticable, because for one thing, the village does not know a clock: that small part of it which does, uses it as a sign of respectability or of urbanity. Injurious because, if we want to adhere to such division, it is found in experience, that the lessons cannot be properly finished.

What is to be done, therefore, is to divide broadly the school-day into 4 periods. So long as the lessons fixed for the first period are not properly done, children are not allowed to begin the lessons of the second period; and until they finish the lessons of the second period, they do not take up lessons of the third period; and so on.

This principle allows of much flexibility in the routine. Sometimes all the lessons are finished a few minutes earlier, and sometimes a few minutes later. But if the lessons have been properly arranged, there is hardly a difference of more than a quarter of an hour.

A copy of the routine, now being worked out in our Single Teacher Primary School, is appended as illustrating the above principles.

7. Individual work.—These methods were good so far as they went. But they did not go to the root of the matter. The outer difficulties were perhaps solved; but the inner ones, those that really mattered, remained. We could perhaps satisfy our Inspectors, but we were not satisfied ourselves.

When the boys were left to themselves to work, much dis-organisation and noise would occur. Some boys finished their work, or half did it, too early; and they started the mischief. The teacher would be disturbed every other minute, when he was taking some other class by some boys coming up for correction, by others asking for more work, and by others again by preferring petty complaints, and by the rest by making noise out of sheer exuberance of spirit.

This was very perplexing; and at one time we were led to think that such disturbances were inevitable concomittants of circumstances in a school where one teacher had to minister to the scholastic needs of a jumble of little children at such multifarious stages of intellectual development.

But a solution was waiting, though we knew it not. In 1922 and 1923, the Dalton Laboratory Plan was being discussed in England and America; and its echo reached us faintly in this distant corner. It was in a private conversation that Mr. Cunningham first threw down a hint that perhaps there lay a solution. But with the

characteristic distrust of a timid mind for anything novel, I felt that the Dalton Plan was perhaps all right for schools in a rich and prosperous country, where teachers were proud of their position, had sufficient of the world's goods, and where both children and guardians understood and valued education. But for such poor specimens of schools, as of ours: well, the less said the better; forgetting the teaching of Psychology that eagerness to learn and to do is the most characteristic mark of childhood all over the world, and that the human mind finds the completest satisfaction at the result of activities obtained by its own effort.

Fortunately Mr. Small happened to be at Shillong at the time. He was then Inspector of the Surma Valley Division. In a private talk he told me casually that it was then a year that he had been experimenting with the Dalton Plan in the Sylhet High School, and that with encouraging results.

This put heart in me. I sent for details from the Sylhet High School; and read the literature I had over again.

A few weeks after this Mr. Small took transfer to the Assam Valley Division, and he was soon at Jorhat. The Jorhat High School soon caught his enthusiasm, and they started Dalton Work in their school.

Fortunately for us, I had at that time as Headmaster of my Single Teacher Practising School a youngman of intelligence—Srijut Adyanath Sarma—who was not afraid of an innovation. He consulted me and got hold of the central principle of the Dalton Plan, namely Individual Work, and made out an assignment for one week for his Class IV boys; and set them to work.

It worked like magic. So far as the teacher was concerned, Class IV was practically eliminated. The children got the week's work; and when the teacher would be busy with other classes, they would go on working their assignment, till he was free to attend to them. The disturbances and the noise vanished; and there appeared an atmosphere of real work. The teacher's work became less tiring, less irritating, and more fruitful, though by no means less heavy.

The work was critically examined by the Inspector of Schools, and seen by the Director of Public Instruction. They expressed themselves satisfied. We got courage to proceed with the experiment; and the result I give in Mr. Small's words:—

"One great benefit that will be derived from a system of this nature is that the writing out in advance of the work to be done in a definite period of time will aid the teacher in systematic teaching and in apportioning his time regularly throughout the year. It will help him to avoid a slackening of work in the early months of the year, and a hurried cram before the Promotion Tests. The other benefit is that, as soon as the boys in Class IV become accustomed to working mainly by themselves, as the boys here have evidently become, the teacher is relieved to that extent of class work, and is enabled to

devote the time gained to the lower classes, which have hitherto been comparatively neglected."

(Inspection Report, dated September, 1924.)

- 8. The Dalton Plan adapted to the work of Primary Schools.—I believe, I can now usefully add a word as to how the Assignments for our Primary Schools are prepared. I need not give any detail; since the regular method of preparing assignments is well-known. I can therefore, conveniently be brief; and I shall only note the variations from the ordinary Dalton Method.
 - (i) The Dalton Plan Assignment is a contract of one month's work. We prefer to give one week's work at a time. For children, it is not wise to give too much to be done at once.
 - (ii) The contract idea is absent from our work; the children are not required to sign any contract.
 - (iii) Our assignments are not too detailed; neither are they the simple enumeration of the lessons. We steer a middle course. General indication of the work to be done is given. Things which the children are apt to overlook are put in the assignments; such as, difficult words, common errors in spelling, things to be committed to memory. But no attempt is made to explain things in the assignment itself; the boys have to get all their explanations from the teacher.
 - (iv) In Assamese we have only a few reference books; and these few even are not accessible to Primary School Boys. So that reference to other works than the Text Books is almost non-existent. The teacher helps when necessary.
 - (v) General lessons to elucidate difficult portions, to explain new rules (of Arithmetic, etc., and to supplement information form about half the school work.
 - (vi) Written works to be shown to the teacher are separately put in the Assignments, easily to catch the eyes of both teacher and taught.
 - (vii) Extra work is given to those pupils who finish their month's work (not week's) before time. This is sometime put in the assignment; but very often is given by the teacher orally.
 - (viii) Unless a boy can do his month's work, he is not usually allowed to proceed to the next month's work; but full discretion is allowed to the teacher to deviate from this principle in special individual cases.
 - (ix) We use only one graph, namely the individual graph. All the work is marked on this graph, which is in manuscript.
 - (x) Markings on the graph is given in three colours—red for good, green for fair, and blue for middling work; bad work is not accepted.

- (xi) Over and above this graph-marking, marks are also given for some class works.
- (xii) In giving Individual Work, it should be borne in mind that the assignments are to be such as can be worked out by all the boys of average merit belonging to a particular class. The duller ones may take more time; but all the work should usually be within their capacity.

A sample assignment and a graph are appended to this note in way of illustration.

Work on this method is given in Class IV only; but the principle is followed in Class III and Class II as well, though not with such details. These classes are given lessons for the day beforehand, and they can go on with their work, when the teacher is busy otherwise than in their class.

I want to add one word. Let no one imagine that the teacher has a good time of it, while the boys are left to work by themselves. Far from it. He has got to be very busy indeed, and to have very watchful eyes to be able to run this work smoothly. The only difference is that his work now keeps all the children busy, while in old ways he used to busy himself all right, but could keep only a few boys busy at one time. That the conditions of work in an atmosphere where every one is doing something are infinitely better than in an ordinary school does not require stating.

9. Co-operation and assistance from the pupils.—My note perhaps will not be complete if I omitted to mention how the children are made to co-operate and help in the teaching work. The Monitorial Principles are of course well known all over the educational world. So I shall be brief.

These principles are: -

- (i) Discipline the boys in fixed habits about sitting, standing, keeping their books and other belongings in proper way and in their fixed places, e.g., leaving shoes and umbrellas neatly arranged in the verandah. This adds to the beauty of the place and generates an atmosphere of orderliness, where work and system appear to be the general rule.
- (ii) Give the children enough of work to do. When all the set work is finished, which however must not happen very often, they can draw as they like, write what they please. For this the slate is the most useful instrument a child can possess. When a class is in want of this sort of work even, they can go out and play. They must in no case be allowed to sit idle and loll in the class. For this purpose some simple devices are of much value. They are briefly noticed in a subsequent paragraph. (Paragraph10.)
- (iii) Institute the Class Captain System. The Captain should be made responsible for work, discipline, and distribu-

tion of and storage of articles required for his class; e.g., pens, seeds, writing books, etc.

(iv) Let boys help, question, and explain to one another in the difficult lessons.

Boys can be formed into groups of two, and each pair may be allowed to prepare their lessons together and examine each other.

In Dictation, a boy can occasionally dictate. In Geography a class can study the map together. In recitation, one boy can lead and the rest follow.

Thus in a hundred ways, an alert teacher can keep the school engaged and make it instinct with life and joy. Care should be taken that one and the same boy is not made into a sort of unpaid pupil-teacher.

10. Equipment.—I have now to add a word about our equipment, lest some reader may imagine that we are working under conditions that are unavailable for our rural schools.

Nothing of the sort; except that our teachers are better qualified than the ordinary run of village school-masters. This had necessarily to be; for, to conduct an experiment, a better type of man than those who would follow the Rule of Thumb arrived at by such experiment have always been granted.

Our enterprise in the direction of elaborate equipment was cut short by the same pitiless Mr. Cunningham, who would not allow us to raise our head to the sky, when our work lay on this mundane earth. He allowed us the minimum equipment that might be always available for our village schools.

We allow each teacher two good black boards, and also good white chalk to write with. The outlay is not extravagant, and yields excellent results. The necessity is obvious.

Each school is provided with a series of text books, and one set of maps, consisting of the District, the Province, India, and the Empire. Some of those supplied are made in the Normal School; but each teacher under training are required to make a set of these maps along with other manual works.

Children sit upon Dharis and write upon ground desks. The teacher is given a table and a chair; and there are a few shelves for books, etc.

The house is of the standard size adopted for Assam Vernacular schools.

Other equipment we have. But they are all hand made and cheap, or cost nothing. Among them are sticks of various lengths and sizes, seeds, card board boxes obtained gratis from some friendly shop-keeper, blank cards (for Arithmetic Work), playing cards for counting and arithmetical games, writing slips, bamboo-handles for pencils, reed pens, sand, and such other articles which may be had everywhere for the mere looking for.

All these are pressed into our service; how, of course is a different matter; and will not be attempted in this note. But I think

that all teachers who have to do with such work are more or less familiar with this sort of method.

11. Results.—I shall now conclude with a brief statement of results achieved. One of the standing problems of Primary Education is the very low—less than 50 per cent.—promotion from the lowest section to the next higher section or class. In the words of Dr. Thomson, "The figures show that only about 14 pupils in every 100 survive from Class IA to Class IV. The majority of the remaining 86, it is to be feared, must lapse into illiteracy. The small percentage promotion from Class IA to Class IB less than 50 per cent. is also a matter which calls for serious attention from all inspecting officers."

(a) Promotion.—The following figures will tell their own tale. Those who are acquainted with our primary schools know that boys remain in the lowest class for 2, 3, and 4 years, and still do not know the alphabets. In our schools, in 4 to 6 months fresh boys, having no previous knowledge of a single letter, are enabled to read and write simple words. This however relates more strictly to another method the method of teaching the alphabets—and may be left over from this note.

PROMOTION FROM CLASS. Number Completion admitted Year and School. of into III to IV Five Years' IA to IB IB to II II to III Class IA 2nd year. 3rd year. 4th year. 5th year. Course. 1st year. 7 1 3 4 5 6 School I . 4 & 3 School II 13 13--3 10 & 1 11 1921. School I 3 & 8 9 - 310 & 2 10 & 5 School 1I 9 & 2 13 - 66 1922. 6---3* School I . 3 3 & 1 4 & 3 3 - 2Promoted from Class II to Class IV. School II 5 3 & 7 8 & 3 10 - 46 1923. School I. 3 & 3 10—1 6 & 4 13 14 & 1 School II 11 & 3 13 & 1 1924, School I 2 & 5 6 & 2School II 13 12 & 4 15 & 1 1925. School I. 8* 7 Promo t e d direct to Class II. 10 & 6 11 School II

N.B.—(1.) & denotes new admission into a class from another school.
— denotes transfer from a class in the middle of the year or after promotion.
(2.) Some boys take admission so late as September, October, and even November.

The above record, I venture to believe, is unique for any primary School.

(b) Regular attendance and punctuality.—This is another problem for a primary school. Figures show that average attendance is about 84 per cent. in the Practising Schools. For the whole of the Province it is 70 per cent. Ours is not a very good record. Many of the boys attend from neighbouring villages; and even in the town many guardians are apt to be somewhat slack in the matter of attendance of their children who are sent to primary schools. Besides absence for festivities at home or in the village, and for sickness during the rains is pretty common all over the country.

We have troubles about punctuality; but probably less than in a village school. Strictness has been found to be a good remedy.

An attendance record hung up in the class-room is a good encouragement for regular attendance. Such boys as are present throughout the month are marked with an asterisk.

The teachers often enquire after a boy when he happens to be absent for more than 2 or 3 days together. This also produces good result.

- (c) Interest of scholars.—In the general criticism of the Dalton Plan, it is said that boys do not read even under the fear of the rod; how can they be expected to work when left to themselves. Apart from the fact that it is a mistake to suppose that in the Dalton Method of work boys are left to do what they please, the above statement has perhaps good logic, but bad psychology to support it. I have found in these two years that boys are more eager to learn when given Individual Work. And I have noticed a few boys working in the half-hour's recess to complete their month's assignment în time.
- (d) Opinions of Inspecting Officers.—Lastly, I may be permitted to quote the following remarks to show how the system is working in the judgment of competent and none too lenient critics:—

After about ten week's work under this plan, Mr. Cunningham wrote:—

"Time permitted of a visit to only one of the Practising Schools—the one-teacher school. The work was excellent, the methods most interesting. Everytime I come here, I find that further progress has been made with reference to my note of 24th July 1917." (Inspection Report.)

On 20th September 1924, Mr. Small wrote: -

"In March, an experiment was commenced in Practising Schools Nos. I and II on the lines of the Dalton Plan.

The boys of Class IV have the work for a week given them in advance, and are allowed to complete it at their own time, merely approaching the teacher for assistance, when necessary, and bringing him the completed work for correction, testing, and marking.

During my present inspection, I examined the work that has been done during the last few months by the boys of Class IV under this system; and am glad to be able to say that it was distinctly creditable both in quantity and quality. All the work was neat and clean, hand-writing was good, and in general the standard reached was above the average." (Inspection Note.)

After more than a year Mr. Small again gave a thorough inspection to these schools. As he was then conducting the practical examination of the teachers under training, he was enabled to examine each boy very thoroughly in all the subjects. And he wrote the following in December 1925:—

"The modified Dalton Work being done here is most successful.

The disturbance caused in the school by the continual change of teachers during the practical examination did not appear to affect the children in Class IV at all.

They were all quietly engaged in their own work, seldom even looking up at the visitors to their room.

If similar method can be introduced throughout the Division the work of our village school teachers will be very considerably simplified." (Inspection Report.)

Daily Routine o	f Practisina	School No. 1	Jorhat. 1926
Daving Loo weened o	, I raccounty	COUNTY OF T	., 50, 11, 1000, 20, 20, 20, 1

Day.	Class.	1st period about 1½ hours from 11 a.m.	2nd period about $1\frac{1}{4}$ hours from $12\frac{1}{4}$ p.m.	3rd period about 1+ hours from 2 p.m.	4th period about 1 hour from $3\frac{1}{4}$ p.m.
1	2	3	4	5	6
	IV	Geography .	Writing and General Know- ledge.		Mental Arith- metic and Kasrat.
	III	Arithmetic .	Drawing and General Know- ledge.	Dictation and Reading.	Reading and Kasrat.
Monday .⊀	II	Object Lesson	Arithmetic and Reading.	Writing	Mental Arith- metic and Kasrat.
	IB	Reading .	Arithmetic and Writing.		
_	IA	Letter-form- ation.	Tables and Reading.		, <u></u>

		1	· · · ·		
Day.	Class.	1st period about 1½ hours from 11 a.m.	2nd period about 1½ hours from 12½ p.m.	3rd period about 1¼ hours from 2 p.m.	4th period about 1 hour from $3\frac{1}{4}$ p.m.
1	2	3	4	5	6
	IV	Arithmetic .	Dictation and General Know- ledge.	Drawing and Reading.	Reading and Kasrat,
	III	Arithmetic .	Writing and General Know- ledge.	Reading	Geography and Kasrat.
Tuesday .	1B*	Writing	Reading and Arithmetic.	•••	******
	II*	As on	 Monday. 	Dictation .	Tables and Kasrat.
	IA	Reading .	Letter forma- tion and count- ing.		
	IV	Arithmetic .	Letter writing and General Knowledge.	Reading	Geography and Kasrat.
	III	Accounts and Tables.	Gardening and Hand-work.	Composition .	Reading and Kasrat.
Wednesday .	II	General Knowledge.	Recitation and Arithmetic.	Writing	Reading and Kasrat.
	IΒ	Arithmetic .	Writing and Reading.		715100
	IA	As on	Tuesday,	,,,	
	IV	Arithmetic	Gardening and Handwork.	Composition .	Reading and Kasrat.
,	1111	Geography .	General Know- ledge and Letter Writ- ing.	Reading	Arithmetic and Kasrat.
Thursday	II	Reading .	General Know- ledge and Arithmetic.	Drawing	Dictation and Kasrat.
	1в	Drawing .	Tables and Reading.	******	******
	IA	Tables .	Reading and Writing.		

Day.		Class.t	1st period about 1¼ hours from 11 a.m.	2nd period about 1½ hours from 12½ p.m.	3rd period about 1½ hours from 2 p.m.	4th period about I hour from $3\frac{1}{4}$ p.m.
1		2	3	4	5	6
			From 11 to 1.		From 2 to 4.	
		IV	Reading and Ming.	lanuscripts Read-	Tables, Bazar Accounts, General Knowledge and Kasrat.	
		ш	Arithmetic and	d Writing	Mental Arithmetic, Reading, and Kasrat.	
Friday	. {	II	Gardening and	Recitation .	Play, Tables, Kasrat.	Reading and
		IB	Tables and Re	ading	••••	**
_	Ų	IA	Seed Work an	d Writing .		
				From	11 to 2.	
	(IA	Arithmetic, Dictation and General Knowledge, Story-telling			
Matuu J		III	Metal Arithme	ge, Ditto.		
Saturday	•	II	Transcription,	Arithmetic, Drav	wing,	Ditto.
	l	IB & IA	Clay model, G	eneral Knowledge	e, Action song,	Ditto.

Assignment for Class IV from 8th February to 13th February 1926.

Practising School No. 1.

Literature.—1. "Invasion of Assam by the Ahoms." I shall give you a model lesson on reading on Monday. You shall have to read to me on Wednesday, when I shall explain the difficult portions.

- 2. Note the following spellings and the meaning of these words. (Here follows a list of words.)
 - 3. Learn the meaning of the following words and phrases.
- 4. Consult map and find out the following places:—Burma, Patkai hills, Kaliabar and Dimapur.
- 5. On Saturday, show me the answers to the following questions written on the slate:—

From what place the Ahoms did originally come? What district lies to the east of Sibsagar? What is the name of the hills to the east of Assam? Where is the kingdom of Pung? Who was the first king of the Ahoms? Who among the Ahom kings gave the largest gifts to Brahmans and Pandits? Who was Turbak?

Poetry.—I have explained to you the poem called Larakal (boy-hood); On Friday, render it into prose before me; I shall ask.

Hand Writing.—Take a copy slip from me; and write. Must avoid scribbling.

Dictation.—Take dictation from page 14 of the lesson for this week. The Captain of Class III will dictate. I shall correct and mark.

Essay.—We have already discussed Railway in class. Write a short description on the lines already given.

Arithmetic.—Do all the sums of Examples 20 and 21 on slate; those I have marked should be worked out in book.

Mental Arithmetic.—On Friday I shall explain the hints by which you can easily find out how from the price of a seer, the price of a maund should be calculated. In the beginning you must work out on the slate the price of a maund, when the price of a seer is Rs. 1-9-6.

Tables.—Learn 15 and 20 and 16 and 20; and write on slate. I shall question.

Accounts.—Take an account sum from me and work out; if time permits, I shall explain how abstract account is to be made.

Geography.—Read about the Sibsagar district from the Bhugolpath. Draw a map, mark the three sub-divisions, all the important places given in the book, showing the thanas in red. Show me on Saturday, when I shall question you.

Object Lesson and General Knowledge.—I have already talked to you about the railway. Write out and show me what a junction and a station is.

You have already learned something about Potato; write out and let me see what you know about it.

Drawing.—Procure of leaf of jack-fruit tree; draw in natural colour.

Hand Work.—Take scissors and paper from me and cut out two envelopes and a fan.

Work to be Shown to Teacher.

- 1. Exercises on literature.
- 2. Hand writing.
- 3. Dictation.
- 4. Essay.
- 5. Note on object lesson, etc.
- 6. Arithmetic sums.

A TRAINING SCHOOL FOR VILLAGE TEACHERS, MOGA, PUNJAB.

That we learn mainly through experience is accepted as a truism. But children in school seldom have opportunity to acquire knowledge in this way. Educational psychology has taught us that children learn best through active experience attended with satisfaction; and a growing number of educators are making practical use of this principle in the class-room. The traditional formal methods of teaching stand condemned because they do not conform to the known processes of learning. Progressive teachers are finding it practicable to introduce the activities and situations of real life into the class-room and help the children to learn by doing.

At Moga in the Punjab is a school which whole-heartedly accepts this common-sense principle. It rules in the life of the school, and conditions all the teaching. It is not uncommon to find the conception of the importance of learning through active experience recognized in the extra-curricular activities of a school, such as the Boy Scouts, the Junior Red Cross, the games, and the literary societies. It is commonly accepted that the way to teach a boy to be trustworthy, is to give him opportunities to act in a situation which requires trustworthiness. The way to teach him to use his mother tongue effectively is to guide him in his participation in literary activities in which he strongly desires to excel. But schools are still rare in which arithmetic is taught by means of situations which require its use, or history is taught in close connection with the problems and present needs of the pupils. Moga, the ideal is to teach as much as possible of the formal subject-matter through projects undertaken by the boys. far as this ideal is realized, interest in studies is neither artificial nor external; it is whole-hearted and purposeful, because it is engendered by activities chosen and planned by the boys them-The results of the teaching and the life of the school are shown not only in the mastery of facts, but in the growth of habits of study and thoughtful judgment, attitudes of independence, initiative and helpfulness. In other words, the boys at Moga are prepared to meet life, because they meet real, rather than artificial, experiences in the school.

The authorities at Moga do not conceive of this type of education as limited to the class of pupils taught at this school, but as applicable to all schools. They consider that it is the right of each child to be given the type of education that will afford the fullest and richest development of his personality. Moga is a revolt against the idea that the training of the hand and the training of the brain, are the work of two different educational institutions. We must take into account a whole boy, a boy with

hands and feet as well as brains. In describing his great school, Sanderson of Oundle says:—

- "Creative education demands that schools should be brought into harmony with the community life, and should take part in the industrial and economic life."
- "I would make the suggestion that we must not keep the life of school too much separated from the working life of the community. When boys and girls go home, even to the humblest home, their parents should find that some part of the school life is associated with their own life and work. This principle should modify the kind of work done in schools, so that when boys leave school they should have already taken part in the work which they go out to do."
- "Is the education for dominance and possession destined to survive? Should not service be the ideal for all schools creativeness and not possession? If so, then account must be taken of this ideal in educational reform."

Purpose of the School.—The Training School for Village Teachers is situated at the town of Moga, Ferozepur District, Punjab. It is a rural community middle school with a normal training department and a primary school for practising and demonstration purposes. There are four years in the primary school, four years in the middle school and one year in the normal course. It was started by the Punjab Mission, Presbyterian Church in the U. S. A. as part of its work for the uplift of the out-castes of the Punjab who are turning to Christianity in great numbers. The work is now under the direction of a board in which the Indian Church shares the responsibility equally with the Mission. The responsibility for the education of these village Christians is a heavy one. The purpose of the school at Moga is to prepare selected village boys for the leadership of their own communities. The majority of the students who finish the course become teachers of village schools.

The school plant consists of about 55 acres of land, 45 of which are under cultivation, with three wells, two silos and stables for cattle. The buildings consists of a main school building with 9 well-lighted class rooms, an agricultural and industrial room, a main hall, library, and office; 3 hostels; quarters for married students; teachers' houses; headmaster's house, principal's house; and a model village school building. The value of the present plant is about Rs. 1,75,000.

The staff consists of 3 missionaries, the principal, his wife, and the vice-principal, the headmaster who is theologically trained, 3 teachers with S. V. certificates, four Moga trained and Government certificated teachers; one trained agricultural master, a carpenter and a tailor who teach village home industries and one woman teacher for the women's school. As practically all the needs of the school are met by student labour, there are only three servants

remployed—a gardener who helps supervise the primary boys' work in the fields, an old man as assistant gardener, and one sweeper.

The enrolment of the school is about 150, of whom about 25 are in the Normal Class, and the remainder are about equally divided between the Middle and Primary departments. Practically all the pupils are boarders. They have nearly all come from extremely poor homes, and usually the parents give little or nothing toward the cost of their education. There are indications, however, that these people are beginning to appreciate the value of education for their children, and are showing themselves more willing to help towards the boys' expenses. The boys come from all over the Punjab, and a few, by special permission, are admitted to the Normal Class from other provinces outside the Punjab. The pupils are mainly Christians, though non-Christians are admitted. A women's school is maintained for the wives of the married students, and other women of the compound.

History of the School.—The school was founded by the Rev. R. H. Carter, M.A., and owes much to his wisdom and educational ideals. His plan was to establish a school for village boys with a training class attached, a school in which the boys would live under simple village conditions, do their own cooking and washing, and receive, in addition to a good general education, especially suited to village needs, practical training in agriculture and ordinary village trades. The purpose of this industrial training was partly to keep the boys in touch with village conditions and to make them an economic asset to their community, partly to disabuse their minds of the idea that an educated man should not work with his own hands, and partly to enable them while at school to contribute as much as possible toward their own education.

These ideals had been partly realized when Mr. Carter had to return to America for family reasons and the Mission selected W. J. McKee, C.E., M.A., to carry on his work. About this time the Frazer Commission on Village Education was visiting India and calling attention to the necessity of improvement in rural education. The Punjab Mission planned an advance along these lines. After special study during his furlough in America, Mr. McKee took over charge in 1920. The school now entered upon a new era of development. New educational methods were introduced; the courses in agriculture and simple village trades definitely worked into the curriculum, and normal training established on an entirely new basis, resulting in the production of a new type of teacher and rural worker, which has given Moga its reputation. Mr. McKee's success as an educator was recognized by Government, and he was awarded the silver Kaiser-i-Hind medal, for his services to rural education, in 1922. In 1924 Mr. McKee was compelled for family reasons to return to America, and the present principal took over charge. Mr. Carter had returned to Moga in 1923, and has since shared the management of the school. He is now Vice-Principal.

Moga owes much to the encouragement and support of the Department of Education of the Punjab. The school is recognized as an experimental school, and is allowed freedom to work out a curriculum suited to rural conditions, and to use methods often radically different from those of the traditional school. The requirements of the educational code are, however, fully met. Candidates are sent up for the Vernacular Final Examination, and the percentage of students passing has been excellent. A special examination based on the Moga normal course syllabus is given to the normal class graduates, and a special certificate, recognized as practically equivalent to the Junior Vernacular training certificate, is granted. The percentage of successful candidates has been always excellent; in 1925 and 1926 it was 100 per cent. grant-in-aid is given for the main school and the normal class as well as for the agricultural department and a grant was given on the main school building. Beyond this, the Director of Public Instruction and the officers of the educational department have given much appreciated help through their advice and interest.

It may not be out of place at this point to quote some recent remarks of distinguished visitors, for the purpose of showing how much the school owes to the interest of Government officers. The school is proud to have some small share in the remarkable progress in primary education of the last few years in the Punjab.

From the Inspector of Schools.*

With a view to affording my colleagues an opportunity to study the up-to-date and practical methods of teaching literary and vocational subjects I invited the members of the Divisional Educational Conference to assemble at Moga on 23rd, 24th and 25th November. On the 24th they all visited this fine institution and Mr. Harper very kindly showed them round the farm, the trades workshop and the classes. They closely studied the teaching of Class I to satisfy their doubts about the practicability of the project method in teaching reading. I am glad to record that they all went back eminently satisfied. The vocational training both in agriculture and trade work was a treat which they all enjoyed immensely.

I need hardly add my measure of praise for the good work done by this good institution. It is an object lesson to those who have eyes to see and are interested in rural education.

27th November 1925.

From Two Governors of the Punjab.

Having heard so much of the school I was most anxious to pay it a visit. I need hardly say that I have been most interested,

^{*} S. B. Sardar Bisan Singh, B.A., I.E.S., Divisional Inspector of Schools, Jullundur Division.

and am glad to find how much the school has been inspiration both to Government Officials and to Missionaries from other parts of India.

26th January 1924.

I need not say that I was particularly interested, not only in the working of the project method of education, but also in the methodical instruction given in agriculture. The former must go far to relieve education of its purely routine aspect, and must add a great vitality and stimulus to its processes. The latter is the first effort of the kind I have had the opportunity of seeing in the Punjab, and I have not the smallest doubt that it is of the highest value. I wish the school and its management every success; it seems to me that it is a pioneer in work which we might with advantage extend in the Punjab.

21st July 1925.

The Curriculum.—The experiments at Moga are directed toward evolving a type of education which will succeed in village schools. The curriculum with which we are working is described in the definition adopted by an all-India conference on rural education held at Moga in 1922; i.e., "A Rural Community Middle School is a school which seeks to use the activities and valuable interests of the village as means for educating rural boys and girls for more abundant living and service in their communities. All the work of these schools, including the vocational or practical work, should be closely related to the pupils' village environment and so far as possible should grow out of it. The vocational work should not be a separate entity but should be an integral part of the curriculum, enriching it and having as its constant aim, (along with the other work of the school), the bettering of present village conditions. Such a school differs from an industrial one in that it is concerned with a broad curriculum and the uplifting of the community through enriched and consecrated personality, while the latter has as one of its principal aims the training of pupils for a definite trade through which they may become self-supporting members of the community."

The curriculum which is being evolved is based so far as possible upon the worthwhile interests of village boys. The change in the curriculum are, however, being made gradually, and the ordinary course of study is covered in addition to the new curriculum material. The enrichment of the curriculum is along the lines of nature study, health education, hand-work, practical mathematics, more reading and composition, etc. The teachers strive for a minimum of memorizing text-book material, and a maximum of observing, discovering, constructing, judging Moga boys are taught to live a real life in the world in which they find themselves.

A critical observer has thus commented upon the class work. "I have been asked several times after describing the agricultural and trade work carried on in Moga, what curtailment had to be made in the ordinary curriculum to allow of this being done. It

will probably come as a surprise to many to be told that not only are all the demands of the Punjab curriculum met with very excellent results but that a great deal more is covered. And this is very largely the result of the Project Method which is adopted throughout the school."

Learning by Doing.—The school endeavours to use those methods of teaching which are based on recent results of the scientific study of educational processes. The so-called "project method" is not used exclusively, but the effort is made to have the point of view on which this method is based, control our teaching as far as possible. For example, we endeavour to present the fact to be learned in a situation that is, as nearly as possible, like a situation in out-of-school life. Dr. Dewey has said:

"When a pupil learns by doing he is re-living both mentally and physically some experience which has proved important to the human race; he goes through the same mental processes as those who originally did these things. Because he has done them he knows the value of the result, that is, the fact. A statement, even of facts, does not reveal the value of the fact, or the sense of its truth—of the fact that it is a fact. When children are fed only on book knowledge one 'fact' is as good as another; they have no standard of judgment or belief."*

Take for example a boy reading in his text-book that 8 kanals make one ghamao. When he does an example, he is apt as every teacher knows, to substitute 4 or 6 for 8. The fact as he read it in the book did not stand for anything that goes on outside the book. It is just one fact of many that he reads and that may or may not stay in his memory. But the Moga boy who calculates the size of his field plot in kanals and ghamaos, and with his class divides a big piece of land into plots, one kanal in size, knows that 8 kanals make a ghamao. He would laugh at anybody suggesting that 4 kanals make a ghamao. The difference in the two cases is that the average school boy "has a result without the activity of which it is the result." To the Moga boy the fact is the result of an experience.

Again, a boy who has tried to memorize a table of weights, may be confused when asked the number of chattacks in half a seer; and not be greatly disturbed by his mistake. But when he and his class-mates are running a real shop in the school-room, he suffers for his mistake. Tables which are used, are quickly learned. In the regulation school, the boy who gets six sums out of ten correct is doing passing work in his class. He has learned that the teacher is satisfied with that quality of work. His aim is to please the teacher, and six to nine times right, out of ten, pleases the teacher. But at Moga he quickly learns that if only eight out of ten transactions were correct, the class shop would soon be bankrupt. So the boys set 100 per cent. accuracy as their own standard. They know the value of the arithmetic fact. Arithmetic to Moga boys is a real part of their life.

^{*} Schools of To-morrow, by John Dewey.

The above is a fair example of the principle which guides our efforts to improve teaching methods. Whenever it is possible, we teach through the use of a project, that is, an activity in which pupils whole-heartedly engage, because they themselves have purposed and planned it. The rôle of the teacher in these activities is that of a guide and friend rather than an autocrat. He helps the boys to choose activities that are rich in educational value. He helps them to carry out their purpose efficiently, to gather and master the necessary information, to learn good habits of work, to complete their project, make a permanent record of it, and judge of its success.

Since one of the essential factors of a project is its spontaneity, we cannot have a fixed "project curriculum." Often projects are repeated, but they must always be chosen by the new class. Illustrations of typical projects used at different times will help to make clear the method, and give some idea of the development of the curriculum. The village home project was used most successfully in the first half of Class I, for several years. The vegetable shop project as described, was the activity of Class IV, in 1925-26. The project on Moga School is being taken up by Class V in 1926, while the hospital project was carried out by Class VI in 1925-26. Three of the following descriptions are taken from the report of a visitor to the school*:—

The Village Home Project.—"The children plan to build an actual house of the same materials as are used in houses in the Punjab and big enough to be played in, i.e., about $5' \times 4' \times 3'$. The construction of the house soon confronts the pupil with the need of certain skills. The length, breadth, thickness and height of the house have to be determined. This involves understanding and using certain units of measurements, e.g., foot, yard, etc. As the house is made of sun-dried bricks which are made by the boys themselves, the need of counting and estimating the number of bricks required arises, and thus arithmetic begins.

From the beginning the children hear stories about the home and the desire to read these and similar stories, as well as to read, on the blackboard and elsewhere, the information necessary in carrying on their activity, leads on naturally to reading. for writing the various facts and figures and labelling the various prices of furniture which will be made later, leads on to the need for acquiring this skill. The plan of the house and the utensils used involve drawing, and the provision of doors and windows, gives the teacher his opportunity to teach simple hygiene, ventilation, lighting, etc. The preparation of models of the various pieces of furniture and utensils required in a house motivates the hand-work and provides ample opportunities for discussion on the food we eat, its value and quality, the materials used in the house, what it is that makes a home attractive and comfortable, etc., etc. When I visited the school in January the school session was in its eighth month and I discovered that even then the curriculum requirements for

^{*} Report by the Rev. Oliver Thomas, Shillong, Assam.

the year had been covered and in arithmetic, writing, reading, composition, had been surpassed, while a number of very valuable activities had been engaged in and information obtained which the ordinary curriculum does not expect."

The Vegetable Shop Project.—"The main project of class IV is the Village Shop. In Moga this is not a play project, though even as play a project of this sort can be made most valuable. In Moga, however, the village shop is a reality for the boys are in charge of the shop which sells the vegetables obtained from the garden plots. In order to run the shop well the boys have had to do a great deal of investigation as to the way shops are run in the bazaar, how the goods are cared for, how bazaar accounts are kept, how profits are computed, what articles are required in a shop, how goods are ordered and conveyed and how paid for when ordered from a distance, etc., etc.

The demands of the shop have led the boys to build a mud brick house about $6' \times 6' \times 6'$, complete with a door, to serve as a place to store their goods, and business is carried on just in front of the building. The shop is opened about half-an-hour before school opens and continues open for an hour, and then is re-opened after school closes. Two boys, in turn, look after the shop each day.

Every evening boys who have vegetables to sell bring their vegetables to the shop where they are weighed and priced according to the bazaar rate which the boys find out once a week. A careful account is kept of every transaction. In one book the names of the sellers, the goods soid, the quantities and value of the vegetables, are entered. In another a similar account of the vegetables disposed of is kept. These accounts are made up at the end of the month and a statement made to the Headmaster who hands over to each boy the amount due to him. The various vegetables are sold to the school mess, the families of the teachers, married pupils and the missionaries, and if any are left unsold they are taken to the bazaar by the boys and sold there. All the sales are carried on in actual cash.

These boys get a very practical knowledge of money, of weights and measures. They are provided with ample material for most interesting arithmetical calculations which fully cover the prescribed course. The business of shop-keeping suggests innumerable topics for composition of different kinds from business letters to advertisement of wares, descriptive accounts of business life, essays on vegetables, their utility, food, value, diseases, etc., etc.

As shopkeepers, the pupils are interested in a wider world than that of the village. So geography of the outside world becomes a subject of considerable interest. Methods of transport, trade between different parts of the province and between one province and another, the varying products of different parts of the country and the reasons for the differences, are all matters of real interest.

I also noticed that these boys were keen readers. In addition to the prescribed Reader, the boys made ample use of the literature

published in the vernacular, with which the Punjab seems to be well supplied. (Lahore alone publishes four chldren's magazines!)

Moga School Project.—The boys of Class V have undertaken a study of their school from its beginning to the present date. They wanted to find out why and when and by whom the school was started, what the ideals of the founders were, and how these ideals have been developed. They are gaining an historical sense and a perspective of time which many pupils do not acquire until much later in life. Many former pupils have been called in and interviewed, and their stories compared and an attempt is being made by the class to write a history of the school that will be authentic. The class also make models of the early and present buildings. will study the values of property and buildings and the cost of maintaining the school. They intend to make a comparative study of the hygienic conditions of the early days and the present, listing the diseases in the school, and if possible finding why certain diseases have been prevalent. They hope to list all the places in India from which pupils and visitors have come to Moga School, studying the routes of travel, mileage, cost of journeys, rivers crossed, etc., As the geography of Class V is India, this work secures interest and purpose for their required study of that subject.

A large amount of practice in penmanship has been secured through writing letters for information, and recording the facts in their note books. Each pupil keeps his own Project Book, and there is also a special class project book in which various pupils who are selected by the class, write contributions. The pupil writing the best composition on the subject has the honour of copying it into the permanent class book. A large amount of arithmetic and geography has been used in measuring land and buildings and making up costs for the records.

This class is developing a loyalty to the school, and a realization of the ideals of the founders which they could get in no other way. Their study of the cost of their education will give them an appreciation of its value that we hope will lead to a deeper consecration of their lives to the service of God and their fellow men.

Hospital Project.—" Perhaps the most interesting and the most valuable project of all was that of Class VI, i.e., the Moga Hospital (This Hospital by the way, is a remarkable institution in the charge of an Indian Assistant Surgeon, Rai Bahadur Dr. Mathra Das, who has made a name for himself throughout the Punjab and the neighbouring provinces as an eye specialist. It has accommodation for 1,400 in-patients, and in the busy season as many as 150 cataract operations per day are performed). The boys of Class VI got interested in the Hospital and were allowed to visit it and study its work. As a result they have opened a little dispensary in their own class room where under the guidance of the teacher, who formerly studied compounding, simpler ailments of the school boys are treated. The table and almirah for this dispensary were planned and made by the boys themselves. The medicines used are bought out of their pocket money, and the small contributions made to their

Dispensary Poor Box. They have made a study of common diseases and the method of treatment; they have undergone a course of First Aid; they have studied drugs, their history and the countries they come from; they have found ample material for their arithmetic and taken a keen interest in working out the percentages and averages of patients in the Moga Hospital from different parts of India, and the diseases they suffer from; and in estimating prices of drugs, They have had experience in careful weighing of small quantities and in the use of liquid measures. They have written careful accounts of their work, and of what they have learnt. They have drawn excellent charts of the human body. They have drawn maps of the world showing the places the chief drugs come from and the methods of transport, and have studied the geography of these countries. The variety of nationalities represented in the Moga Hospital—Kashmiris, Pathans, Sikhs, Mohammadans, Hindus, etc., gives a splendid starting point for the study of the history of these peoples. They have searched the vernacular papers and collected the information into a book.

The day I spent in this class I found the school boys requiring treatment waiting in a queue, and one boy acting as clerk and filling in the forms, which had been prepared by the class, with the name of the patient, his disease, and the prescription given in consultation with the teacher. Another boy did the dispensing, and a third boy dealt with sores. Some of the boys were preparing patients' forms, one boy was preparing a form to record the height and weight of the class, and another was attending to the register of patients. The remainder of the class was engaged in a weekly stock taking and preparing a list of drugs to be ordered. The actual quantities required, with their cost, were written on the blackboard. The cost of the drugs required amounted to As. 12 pies 6. The teacher, thereupon, got the boys to work out by the unitary, proportion, and multiplication methods, the cost for a year at 12 annas 6 pies per week.

It was a great pleasure being in the class and seeing the keenness of the boys and the evident interest and pride they took in their work. The class room, too, reflected the interest of the boys for the walls were covered with diagrams, charts, maps, and pictures, prepared or collected by the boys."*

Other projects that have been successful in supplying motives for learning may be mentioned. The Post Office project in Class III develops great interest on the part of the pupils. Practically all the requirements of the Government Code are met by means of this project, and much additional worthwhile information and certain desirable attitudes are secured. A banking project, a postal map of India project, making a map of Ferozepur District, the raising of fowls, the study of cotton or some other special product, have all been useful projects. Motives for short projects are constantly arising. Christmas, Easter, Basant and other special days or seasons afford opportunities for pupil activities. Making toys and gifts

^{*} Nore.—The Junior Red Cross have kindly supplied much of this material.

for others, writing letters of Christmas greetings, making decorations for school, etc., are all teaching opportunities when through the boys' own purposing, planning and executing, there is created greater interest in the work of the school and the complete co-operation of the boys is won.

Other Methods.—All the teaching is not done by projects. and memorizing are not neglected though they are made interesting and vital if possible. Formal methods are often resorted to. Teachers, here as elsewhere, show varying degrees of skill, and do not always grasp the principle or live up to the ideals. Moga is continuing to experiment with and to adopt methods based on educational psychology. Mr. McKee's investigations in the psychology of handwriting were very helpful in improving the teaching. Mr. McKee also worked out an adaptation of the story method for teaching beginning reading. Through the use of this method, all the pupils of Class I during the past three years have completed the work of the year with but one exception, and more than half of Class I pupils finish two years work and pass into Class III. Further investigations of the psychology of arithmetic and reading are planned for the improvement of our methods of teaching these subjects.

Intelligence tests are made use of in grading pupils, permitting some to advance more rapidly, and eliminating a very few who are found unable to profit by further education. Through the kind co-operation of the Department of Psychology of Forman Christian College, these tests have been administered by students trained under Dr. Rice. The test used has been Dr. Rice's Hindustani Binet-Performance Scale.

Life and Work of the School.—The same educational principles prevail in the general arrangements and management of the school. As in the class-room, so in the outside activities, responsibility is placed upon the boys. Each must contribute his share to the common good. The life is kept as simple as possible and close to village conditions. The boys do their own cooking, washing and mending. They care for the cattle and keep the grounds in order. The class work and the outside work are correlated. The field work is related to class studies through nature study in the Primary and agriculture in the Middle, through composition, account keeping, etc. The knowledge gained through the carrying on of village trades is made use of in the making and repairing of articles for the school or the farm, in preparing drawings of implement, etc., and in the study of village social problems.

The students themselves take a large degree of responsibility for the general management of the school. The Panchayat is the governing committee of the student body. They are elected annually by the boys from among themselves. The Panchayat handles many cases of discipline and arranges other affairs related to school life. The boys also elect a Food Committee who purchase the food, keep accounts and assign to the different boys the daily duties of cooking. Each boy gives about one day out of 20 for cooking. There is also a Committee for Caring for the Sick, a Committee on Sanitation and Hygiene, a Committee on Lighting. The elections are democratically conducted and the boys make very wise choices. The election is preceded by discussion in the classes, on the qualities requisite for leadership.

The summer schedule of the school is as follows:—

Rising b	ell		•				5-15 а.м.
Morning							
Classes							A 15 A 15
${f Recess}$					•		8-158-30
${\bf Classes}$			•		•		8-309-30
Morning					•		9-3010-00
${ m Classes}$	•	•	•				10-00-12-00
${f Rest}$							12-00—2-00 р.м.
Study pe	\mathbf{riod}						2-00-4-30
Work pe							4-30-6-00
Games a	nd R	ecreat	tions				6-007-30
Evening	meal		•				7-308-00
Evening	devot	ions i	n cha	rge of	f pup	ils	8-00-8-15
Study pe	riod		•	•			8-15-9-30

In the winter schedule the classes are from 10 A.M. to 3-30 P.M.

The work of the farm is largely done by students. One and a half hour a day are given by each boy to outside work. In addition, each class, from Class IV through the Middle and including the Normal, gives one full day a week to work outside of the class room. The morning of this day is given to agricultural work and at least part of the afternoon to trade work. In this way, a continual supply of labour is made available for the farm and gardens.

The School has a garden of nine acres. Each pupil from Class V up has a garden plot 35×35 feet. The remainder is worked as a school plot by the boys of the Primary classes under the guidance of the gardener. The school also has 36 acres of farm land, about half of which is devoted to dry farming. Class V cares for a large piece of land as a class. Each boy from Class IV up is given 1/6 of an acre of land under well irrigation. Some of the dry farming land is also given to pupils. The remainder of the land is worked by all the boys for par at labourers' wages. The younger boys are paid wages according to their earning capacity.

The plots are worked on a project basis. Each year the agricultural instructor draws up a detailed list of the plots with the possible earnings from different products. The boys then choose the crops they wish to grow. Each boy personally is responsible for his plot, but the whole work is of course under the general supervision of the agricultural instructor. A variety of crops is grown such as wheat, maize, oats, cotton, grain, mustard, etc., together with the ordinary garden vegetables.

Boys are given definite agricultural instruction and are taught to use both the agricultural implements ordinarily, in use in the villages and improved implements suitable to the country. They are also taught the care of cattle and the securing and storing of fertilizing products.

Every boy is expected to accept the idea that no work which may be necessary for the maintenance of the life of the school is a disgrace. Each one must be ready to do any work on the farm or in the school. The dignity of labour is constantly taught. The staff set an example to the pupils by keeping gardens themselves and being willing to help also in any work that may be necessary. The graduates who return to the school point with pride to buildings they have helped to erect, trees they have planted and developments of the school in which they have shared.

The teaching of village home industries is also partly on a project Our ideal is that a boy who completes the course will be able to take care of minor repairs on his home, and make and mend his clothing, and be able to teach the village community gainful occupations supplementary to their field earnings. In Class IV the boys learn to make a kurta, a pair of pajamas and a cap. Class V they make baskets and various products from reeds (sarkanda) such as rope, screens (chicks), etc. Class VI make articles for the village home and village school, such as sun-dried bricks, doors, stools, blackboards, etc. Most of the mud plastering of the roofs of the school buildings is done by pupils. Class VII and VIII and the Normal Class learn simple iron work in order to make and The Normal Class also learn book-binding and repair farm tools. cover all the school books used, as well as do some work for other schools.

Self-Help at Moga.—It has always been the custom in this school for boys to contribute to the cost of their education by their labour. From an educational point of view, however, this required labour did not yield all the returns in character development which we thought possible. We have therefore introduced a new plan of self-help, which has now been in operation a year and a half. The guiding rules of the plan are as follows:—

(1) The pupils, from the youngest primary boys to the normal class pupils, handle actual money which they have earned. (2) All the boys keep account books and know where they stand financially at any time. (3) The boys are paid only actual value of the work done. (4) Every boy pays a definite sum monthly toward his school expenses. (5) No pocket money is given to pupils. (6) Industry is encouraged by giving to the most trustworthy pupils special jobs. (7) Pupils are not allowed to receive pocket money from outside sources.

Before inaugurating the plan, a thorough study was made of the cost of education at Moga. The estimates excluded all capital expenditure for land, buildings, etc., but included all annually recurring expenditures, as salaries of staff (including missionaries), servants, school supplies, repairs of buildings, agricultural and trade work expenses, etc. These expenses were divided among three groups of pupils, *i.e.*, Primary, Middle and Normal, and the

cost of educating a pupil in each of these departments was calculated. From this was deducted the Government grant. It was found that each Primary pupil was costing the Mission Rs. 12 to Rs. 14 per month, each Middle pupil, about Rs. 17 per month, and each Normal pupil, about Rs. 23 per month.

A study of the actual earning power of pupils showed that there were four possible kinds of earnings, i.e., (1) profits from the customary $\frac{1}{6}$ acre of farm land, from the garden plots, 35×35 feet; (2) earnings from trade work; (3) earnings from general labour, as work in school gardens or school fields, repairing of school buildings, running errands, caring for cattle, etc., etc. For such work the pay was according to bazaar wages, 4 annas for eight hours' work for the smallest boys up to 10 annas for eight hours' work for the largest pupils; (4) earnings for special work like that of night watchman, care-taker of tools, etc. Each boy also earns for cooking as he takes his turn in regular order.

Part of the above study was made class-room work in arithmetic by some teachers, and pupils worked out costs, gross and net earnings of the garden and field plots. The rates for labour were fixed and made known to the boys. They are given individual cash books in which they record all items of labour and the rates, each item then being signed by the instructor or monitor in charge, or the person for whom the work is done. Even Class I Primary boys are taught to keep their accounts with a series of marks, until they learn to write well enough to keep their books in regular order. Class IV keep the account of vegetables brought by the older boys to the shop.

The older boys keep detailed accounts of the expenditures and receipts from their plots. Every field and garden plot is a pupil's individual project, undertaken on the same conditions as if rented from a land owner, and money earned is actual net profit. The boys pay to the school rent for the land, tools, and irrigation. They also pay for seeds and manure. These accounts are carefully kept both by the boys and the instructor and are balanced monthly. The following is a typical monthly account taken from the ledger of April and May 1925:—

Debit	.	Rs.	Α.	Р.		Credi	t.	Rs.	A.	P.
Maize seeds .	•	0	4	0						
Labour (in cas	h) .	0	5	0						
Manure .		0	4	0						
Labour .	•	0	1	6						
Water rent .		0	4	3						
Land rent .	•	0	1	6						
Tool rent .	•	0	1	6					,	
		1	5	9				0	0	0
36					Main 6	٦				~~
May	•	0	0	0	Maize (rop .	•	2	0	3

From their earnings, all pupils pay school fees as follows:—Class I, II and III, Re. 1 to Re. 1-8 per month; Class IV, Rs. 3 to Rs. 4 per month; Middle Classes, Rs. 4-8 to Rs. 5 per month; and the Normal Class, Rs. 5 per month. The balance of their earnings they spend as they please. Industrious boys are able to earn a reasonable amount of spending money.

An essential feature of the scheme is that all the work of account-keeping is considered part of the class-room work in arithmetic and writing. We give a whole day, the first of the month, to the making up of accounts in the class-room. But let no one think that this is wasted time from an educational point of view. It provides the most vital teaching possible in arithmetic. We have perfect "life situations" in the class-room. The necessity for 100 per cent. accuracy in this work has greatly helped in stimulating accuracy in all the arithmetic study.

After much experimentation in the class-rooms a satisfactory form of accounts has been worked out, which saves much book-keeping. The teacher keeps the class record in this form, but the pupils do the actual reckoning.

Name.			Income (PUPIL.	Expenditure.			
		Trade work.	Agricultural work.	General Labour.	Total Income.	Trade work.	Agricultural work.	School Fees.
		Rs. a. p.	Rs a. p.	Rs. a. p.	Rs. a. p.	Rs. s. p.	Rs. a. р.	Rs. a. p.
Pupil A	(October .		3 2 6	0 7 0	3 9 6			4 8 0
	November .		5 14 6	0 5 6	6 3 9	•••		4 8 0
Pupil B	Coctober .	•••	3 15 3	0 11 6	4 10 9	•••	•••	4 12 0
	November .		5 7 6	0 5 6	5 13 0		! 	4 12 0
Pupil C	October .	•••	5 3 6	1 6 0	6 8 6			4 12 0
	November .	***	8 12 6	1 5 0	5 1 6	***	•••	4 12 0
Pupil D	October .	•••	2 15 6	2 4 0	6 3 6	•••	•••	5 0 0
	November .	0,50	5 4 9	1 12 0	7 5 9			5 0 0
			{		l [

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Some have feared that this system would produce a mercenary spirit in the boys. If you call it mercenary to expect pay for work you might be unfavourably impressed by the business-like manner in which the boys bring their account books to be signed for most of the work they do. But we do not call a workman mercenary when he asks pay for his work. A better test of the attitude produced by the self-help plan is, I think, to be found in the use the boys make of their money, when they are free to spend it as they The payments toward the pastor's fund, and other church contributions by the school, have increased as the boys gained confidence in this scheme and in their ability to pay their fees and small necessities month by month. They also give generously to outside causes. It was encouraging to see their happiness on Golden Rule Sunday, when the boys (in addition to contributions from the staff) surprised us all by subscribing Rs. 106-12-9 to Near East Relief. This all came out of their earnings. One boy stood up and said, " As this is a matter of food for these poor people, I propose that we do our cooking free for a month and pay that Rs. 45 into this fund." This was enthusiastically voted by all.

There have been difficulties. Occasionally pupils are tempted to cheat and give false accounts. A spirit of covetousness may also be shown. The influence of the teachers, and talks in the school assembly help to keep the boys straight. It must be remembered that such temptations will assail these boys in life. Their presence in the school life is an opportunity to guide and help the pupils. The conscious resisting of such temptations builds true honesty.

We have observed many excellent results from the self-help. The academic standing of the school has not suffered. Indeed the cleverest and most industrious boys in their studies, usually earn the most money, too. Willingness to work, thrift in expenditure, and the spirit of responsibility and independence are growing.

One of the students, at the end of the school year, gave the following estimate of the value of self-help:—

- (1) We have found that learning (tahlim) and work (kam) are one. Life is not only reading books but also learning to take care of yourself.
- (2) By this work we learn to appreciate what our parents have done in providing for us.
- (3) By work we become strong in body and are then more able to work whole-heartedly for Christ.
- (4) A hand-working man honours other men who work hard and is honoured by them too.
- (5) In India nine out of ten men work in the fields for a living. We cannot be in real sympathy with the majority of our fellow Indians until we know how to work in the fields.
- (6) Since earning my own money and paying fees I feel more honour and self-respect. I think all the boys feel this

way. When we had the opportunity to give to the Near East Relief we were proud that we could give money which we had earned ourselves.

The Normal Course.—The culmination of the training is found in the normal course. The course covers one year, but is very thorough. The following is the syllabus:—

Observation and Practice of Teaching.

Principles of Teaching.

Child Psychology.

Methods of Teaching Reading, Writing, Arithmetic, Hygiene, Geography, etc.

Rural Social Problems,

Religious Education.

Agriculture.

Village Home Industries.

Village School Management.

This scheme, though departing considerably from the Government curriculum, has been approved by the Department of Education.

All the courses studied by the Normal Class are based upon a simplified but thorough study of the applications of psychology to teaching method. Students are trained in the observation and study of children and are helped to determine the general principles of teaching from their own observation and practice. The practice of teaching is stressed throughout the year. The students do a large amount of independent reading, and learn to think and plan, rather than slavishly follow a mechanical routine.

One of the most interesting subjects in this course is that on social problems, which includes a study of the various problems of the Indian village, economic, physical, social, educational, moral and spiritual. Methods of helping in the solution of these problems, the place of the school as a community centre, the ways in which the teacher can help to uplift the village, co-operative societies, their organization and value, etc., are studied, and students are taken out to study actual conditions in the villages round about and to suggest methods of improvement. In this way the students are prepared for moral leadership.

The observation of village conditions and actual practice in schools is considered the most necessary and valuable part of the year's work. For in addition to the observation and practice of teaching in the practising school the students begin early in the year to make a study of educational conditions in village communities. Groups are taken regularly to village schools within motoring distance, to make a survey and report to the class. These reports were made the basis of class discussions. Near the end of the year of training the entire class are taken into the heart of a mass move-

ment district, where they live for two weeks, organizing and maintaining new schools, teaching in established schools, beginning community work, and carrying on their studies and class discussions on the basis of their experience.

Religious Instruction.—The education given at Moga is definitely religious. In his recent careful study of "The Education of India," Mr. Maylew states his conviction that "Indian personality and life, as a whole, will not intimately be affected by an education which is not animated by religion." In so far as Moga is succeeding in its ideals, it is producing results in Christian character and personality.

The whole school is pervaded by a religious atmosphere and religious education is made the main aim of all teaching. Religious teaching is not conceived of as a separate subject of instruction, divided from so-called "secular" education. All the activities and teaching of the school contribute to practical religious education. Right conduct is emphasized as the goal of all the school work. Class projects, co-operative enterprises, field and trade work, community service, etc., are means used in the development of Christian character. In addition, a definite course of religious training is given, which aims (1) to develop the devotional life of the pupils, (2) to teach the essential habits of the Christian life, (3) to secure a thorough knowledge of the Bible. The emphasis of this instruction is upon growth through experience, and projects are often used in the Bible class.

In the school life, the Christian spirit finds expression in many ways. The boys are taught to serve. They help each other, and they learn to help the community. Every Sunday eight or nine groups of students go out to nearby villages carrying inspiration from the school to the wider community, through conducting Christian services and Sunday Schools.

The school strives to enter helpfully into the life of the Moga community. The Headmaster is a member of the Municipal Committee, and is heartily interested in community affairs. During the two weeks that the Normal class spends in the village, practical training in community service is a regular part of their course. This community spirit has recently found expression in a project undertaken by the staff and the pupils. They have opened a school for the depressed classes in the village of Old Moga. Months of preparatory work were required before the people were roused to desire a school. The school is taught by volunteers from the Normal Class and supervised by a committee of teachers. It is planned to secure a regular teacher. The staff and pupils propose to raise the funds among themselves for the support of this school.

Extension Work.—The Training School for Village Teachers is central in the Punjab Mission's plant for village education. The inspectors of the village school system come to Moga between tours for advice and instruction. They demonstrate in the village schools under their care the new methods learned at the training school. A

Village Teachers' Institute is held annually at Moga for two weeks. Refresher courses are given, and reports are heard of experiences with the improved methods in the village schools. The majority of these Mission village schools are staffed with Moga-trained men. Three-fourths of these schools use the Moga method of teaching beginning reading, and about forty per cent. make some use of the project method.

The Moga School is frequently called upon to help by giving special demonstrations of new methods. In 1924, Mr. McKee gave a four months' course in English to a group of educationalists from various parts of India. There are now many training schools and village schools carrying on fruitful experiments in rural education. The help and interest of these educational leaders who are cooperating with us have been large factors in the measure of success the school has attained.

The Village Teacher's Journal is published at Moga in English and Urdu editions. Five other vernacular editions are published in different parts of India. This paper is a clearing house for new methods, and records successful experiments being carried out in village day and boarding schools, and normal training institutions. The vernacular editions keep the village teachers alert to new ideas, and offer suggestive plans to be tried out. There are 700 copies printed in English and 600 in Urdu. Many of the subscribers are Government educational officers, and one District Inspector is supplying the journal to all District Board schools.

The Moga school lays no claim to the discovery of the way of success in rural education. It strives to maintain the experimental attitude, which learns from failures as well as from success. many respects, the school has not succeeded in living up to the spirit of its own ideals. Only a small beginning has been made in evolving a curriculum and methods in reading and arithmetic fitted to the environment and the mental processes of Indian boys, and based upon psychological research. Moga has so far not succeeded in making use of the cultural heritage of India in the education of The teaching of Indian music and art, the development of more reading material from Indian literature have not yet been attempted. However, in so far as the school has succeeded in using the natural activities and interests of village boys as the basis of the curriculum, and in using the principle of learning by doing as the basis of method, it has secured results in vitality and interest in school work, independence and initiative in thinking, and selfreliance and willingness to serve.

THE MEDICAL INSPECTION OF SCHOOL CHILDREN AT SIMLA.

A feeling of dismay is occasioned by the present neglected position of school medical inspection generally in India. This important class of medical work has now been undertaken in Simla, the summer capital of India, by the introduction of a well framed scheme.

Prior to September 1923, this work was not considered one of the duties of the Medical Officer of Health, and no kind of system existed. Simla, with its season population of over 40,000 collected within a restricted area, is perhaps particularly well situated for work of this nature.

With the introduction of the scheme in September 1923, the services of the Municipal Health Department Sub-Assistant Surgeon were utilized. In addition to his other duties, he acted in the capacity of School Medical Inspector, his work being closely supervised by the writer. At first the scheme was confined to the ten primary boys' schools, which schools receive grants-in-aid from the Simla Municipality. The scheme embodies:—

- 1. A monthly medical inspection of each boy, with a view to the prevention and cure of disease.
- 2. The assured treatment of affected children.
- 3. A quarterly report of the above results.
- 4. A monthly inspection of school premises, followed by a separate report.

The monthly medical inspections.—These are carried out at the school premises. Each boy in every school is examined once per month during the school-year (March to December). These examinations are not mere cursory glances, but consist of a systematic over-hauling of each child. The inspection is made by classes, so that the routine work of the school is not interfered with. Each class master attends while his boys are being inspected, in this way he receives instruction in the elements of the examination. The boys are paraded in batches of five or six, stripped ready for inspection. Each boy passes before the Medical Inspector, who first notes the name of the boy, the name of the parent and his occupation, height, weight, chest measurements, general physique, previous illness and family history.

At subsequent examinations, height, weight, chest measurement and general physique are recorded each quarter.

The boy is next rapidly examined from the crown of his head to the soles of his feet. Special attention is paid to cleanliness, skin diseases, ear diseases, deafness, eye diseases, dental diseases, oral sepsis and mental capacity. Following the examination the record for each boy is entered on an index-card. Each boy has his corresponding index card. The index cards are so prepared that each

shows the complete monthly medical record of the child, extending over a period of six years, further the minimum amount of writing is required for the entries. These are made by figures or by a plus or minus sign.

An average of two to three minutes is spent on the examination of each child, but at subsequent monthly inspections the healthy children become personally known to the examiner, and are rapidly passed over, while more time is devoted to boys who do not show sufficiently quick improvement under treatment.

The treatment of affected children.—This is the crux of school medical work. In Simla, treatment is divided under two headings:—

- 1. Those boys requiring minor attention such as lack of a bath, requiring a hair cut, teeth cleaning, attention to dirty finger nails, poor physique, etc.
- 2. Those boys requiring definite medical attention.

For boys falling under the first heading, the class master prepares a list, at the time of inspection, under the direction of the Examiner. This list shows the name of the boy, the affection and the required treatment. It is presented to the headmaster after the examination of the school is completed and he is responsible that these children receive the required treatment before the next monthly inspection. Headmasters guard these lists very carefully and experience shows that action is taken on the recommendations made.

For boys falling under the second heading, a postcard with perforated margin printed in vernacular, is issued to the parents of the child stating whether the child requires treatment at the hospital. These post-cards are prepared from the index-cards at the time of the examination. Acknowledgments of the post-card is received by means of the return to the school of the perforated margin. These are subsequently checked.

On the card the parent is advised that the child has been examined and found to be suffering from a defect and stating the re-A treat is made clear on the card to the effect that if the child is not medically treated, recommendation for its exclusion from the school will be made to the school authorities, until such time as the child is treated. This post-card is then presented by the parent or by the child itself at the hospital or to a private doctor, who treats the child and notes on the post-card the treatment These cards are collected from the hospital and private doctors in Simla at the end of each month, classified according to schools, and the number so collected forms a check on the number of children who have actually received medical treatment. At subsequent examinations, should children be found to require continued treatment, a second post-card, called "Continued Treatment Card" is issued to the parent, such cards are recollected and checked in a similar manner to those as above described.

The treatment recommended for each boy is entered on his indexeard at the time of the monthly examination by a plus sign. At subsequent inspections, the examiner sees whether the child has, or has not received treatment and he records this on the child's indexcard by either a plus or minus sign. In the latter case he makes close enquiries why the child did not receive the treatment recommended at the previous month's examination.

Report on the results of the inspections.—At the end of each school-quarter, a report is compiled from the index-cards, and these results are embodied in a very comprehensive chart.

These results indicate, under the heading of each school:-

- 1. The number of children examined.
- 2. The number of children recommended for treatment.
- 3. The number of children who actually received treatment.
- 4. The diseases from which the children were found to be suffering.
- 5. General remarks on the general health of the boys.

At the end of each school-year, the Medical Officer of Health examines each child's index-card, and from the contained results, he enters his note on the last page of the index-card. This note briefly states the progress or otherwise in the health of the child during the year. This also forms a check on the work executed by the School Medical Inspector.

Inspection and report on the school premises.—Such inspections are made by the School Medical Inspector once per month, and are checked by the Medical Officer of Health once during each school-quarter. The results of such inspections are recorded on a quarterly chart, which chart is similar to that used by the Liverpool Corporation. Details of the sanitary condition of each school, with recommendations for improvement of defects are embodied on the chart. These recommendations are repeated each quarter until action has been taken to remedy the defects. In this way many improvements at the schools have been effected.

Further details and advantages of the system.—(1) Eye-sight.—Those children found, on examination to be suffering from defective vision, are carefully re-examined at the eye department of Messrs. Walter Bushnell, Occulists, Simla, and the necessary spectacles are prescribed. This reliable firm of occulists supply the spectacles at reduced rates. The Municipal Committee has allotted a grant of Rs. 500 to provide spectacles for children whose parents are too poor to buy them. In such cases, the free or part free provision of glasses for the children is ensured, but the merits of each case are carefully enquired into, before such free or part free spectacles are given.

- (2) Dental caries.—An arrangement has been made with three private dentists of the town, whereby children requiring dental treatment are given the choice of attending one of these three dentists, who carry out the work at reduced rates.
- (3) Vaccination against small-pox, and early isolation of infectious cases.—Children found either un-vaccinated or requiring revaccination are immediately vaccinated by the Municipal Vacci-

- nator. A striking example of the advantage of frequent inspection was evidenced in June 1925, when one child was found to be suffering from a modified attack of small-pox. The child was removed from the school direct to the Isolation Hospital and the whole school was re-vaccinated. No further cases of small-pox occurred in the school.
- (4) The general cleanliness of boys.—At each school a daily inspection is made by the masters; and class marks are awarded. These marks are recorded in a ledger kept at each school. At the end of each school-year the Municipal Committee grant prizes for cleanliness. The regular monthly inspections add an extra stimulus to both boys and masters.
- (5) Goitre.—This disease is common amongst children in the Simla hills and so routine treatment for the complaint is ensured by regular examination.
- (6) Tonsils and adenoids.—Early treatment for these defects necessarily ensures an improvement in general physique.
- (7) Educational posters.—These have been printed in English and vernacular and are hung in the class rooms. Masters utilize these posters for instruction of the boys by the construction of essays, etc.
- (8) Lectures; Cinema performances and plays.—The Simla Municipality possesses an up-to-date Lecture Hall presented by Her Excellency the Countess of Reading. This hall is known as the "Lady Reading Lecture Hall" and it is a part of the Infant Welfare Centre. It is fitted with the latest model Pathé Cinema and lantern projector which was presented by Mr. Jehangir Madan of Calcutta, and it is also fitted with a stage.

Regular weekly educational lectures, cinema pictures and plays are staged for the school children, who eagerly attend.

By this means, the simple principles of hygiene and knowledge concerning communicable diseases is imparted not only to the boys, but also to the masters.

Such educational activities are found to be of the greatest value.

- (9) Open-air-classes.—Such classes are regularly held at each school and debilitated children are especially dealt with.
- (10) Drill exercises.—At the larger schools, the drill master holds regular classes. At the smaller schools the head-masters undertake the regular drilling of the boys.
- (11) Invitations to parents.—Parents are invited to attend and see the medical inspection of their children as is done in the West.
- (12) Extension of the system to the Indian Hill States surrounding Simla.—By agreement with the Superintendent, Hill States, this system has been extended to the Indian States immediately surrounding Simla, and special progress has been made by the Bhujji, Koti and Baghal States. The State Doctors make the inspections and regular reports are submitted.

(13) Co-operation between School work and Infant Welfare work.

—All boys and young children attending the Infant Welfare Centre clinics are card-indexed. In course of time, these cards will pass to the schools. Thus a complete medical record of the child will be kept from birth up to the school leaving age.

Results of the work for the period from September 1923 to December 1925.

(Results for 1926 are not included as these have not yet been completed.)

For the first quarter ending December 1923, following the introduction of the scheme for the ten primary boys' schools, 67.9 per cent. of children were recommended for some form of treatment, while during the quarter ending December 1924, this figure had been reduced to 33.08 per cent.

For the first quarter ending December 1923, out of those children recommended for hospital treatment 45.9 per cent. actually received treatment, while during the quarter ending December 1924, this figure was 86.03 per cent. Thus after a brief period of 15 months one can readily appreciate that disease incidence amongst these children had been steadily reduced, the cause of this decrease being undoubtedly due to the ensured treatment of the children.

The Municipal Sub-Assistant Surgeon at that time was also in charge of the Infectious Diseases Hospital, consequently at the time of an infectious disease outbreak, such as small-pox, school inspections had to be suspended. This occurred during April and May of 1924 and again in April and May 1925.

Partly on this account, but chiefly because of the success of the scheme for boys attending the Primary classes, the Municipal Committee approached the Punjab Government in March 1925, and recommended that Government may be pleased to extend the system to the classes of all the schools in Simla and to include boys of all standards up to the school leaving age. For this purpose, the Municipality recommended the appointment by Government of a whole-time Sub-Assistant Surgeon to act as School Medical Inspector at Simla. The Punjab Government accepted the recommendations of the Municipality and in early June 1925, a Sub-Assistant Surgeon was appointed to work under the direct supervision of the writer.

From this time 2,270 boys came under supervision. Of these 81 per cent. were at first referred for treatment. 80 per cent. of those referred for treatment received it and in December 1925 the percentage referred for treatment had been reduced to 30 per cent.

Height, weights, chest measurements and general physique.—No statistics have ever been compiled in regard to height, weight, chest measurements and general physique for Indian school children.

Such averages for the Indian school child, of all ages at Simla have been compiled.

At six years of age, the average height of the English school child is 3 feet 8 inches, the Simla child is now 3 feet 7.2 inches. The average weight of the English school child is 3 stones $2\frac{1}{2}$ lbs., the Simla child is now 2 stones 13.1 lbs. (i.e., 3.4 lbs. lighter).

The Simla boy now has a chest measurement in expiration of 21.5 inches and in inspiration of 22.2 inches.

At this age 19 per cent. of boys are now of good physique and 81 per cent. of fair physique.

The Simla child maintains a similar height to the English child, up to the age of 14 years. In weight he is generally less throughout the ages. The Simla child reaches half his adult weight at 12 years of age, similar to an English child.

Defective Vision.—On examination, 4·1 per cent. Simla children were found suffering from defective vision. All these cases have been corrected with spectacles.

In England and Wales, it is estimated that 10 per cent. of children suffer from visual defects.

In England, difficulty is experienced, in ensuring that children suffering from defective vision will wear their glasses. I have not experienced this difficulty at Simla.

Dental caries.—114 per cent. of children at Simla, require dental treatment, of these, 0.7 per cent. have 4 or more carious teeth. In England and Wales, no less than 546 per cent. of children examined, suffer from dental caries and a large proportion of these have 4 or more decayed teeth.

Tonsils and Adenoids.—At Simla, 51'3 per cent. of children were found suffering from enlarged tonsils and adenoids. By treatment this has been reduced to 7'9 per cent. Those remaining now, require operative treatment. Children between the ages of 7 and 12 were mostly affected, and Hindoo children suffered more than Mohammedans and others.

2.8 per cent. of those suffering were mouth-breathers, and 0.2 per cent. had accompanying defective hearing.

It has been recently stated, that 37 per cent. of London School children have adenoids and that 72 to 76 per cent. have enlarged tonsils as well.

Vaccination against small-pox.—Not a single school child at Simla escapes vaccination against small-pox. This is a striking comparison with England and Wales, where at least 50 per cent. are unprotected against this disease.

Goitre.—By means of the Iodine treatment, the percentage of Goitre cases has been reduced at Simla from 2.5 per cent. to 1.5 per cent. In Berne, Switzerland, it is stated, that in 1881, 80 to 90 per cent. of school children suffered from Goitre. In Western Virginia 9 per cent. are goitreous and in Washington 18 per cent. McCarrison writes, 20 per cent. of the population in the Himalayas suffer from Gc tre

Malaria.—During 1925 only 4 cases of Malaria were recorded. These were relapse cases. By means of adequate treatment, enlarged spleen incidence has been reduced from 16.4 per cent. to 0.3 per cent.

Anæmia has been reduced from 15 per cent. to nil.

Uncleanliness and skin diseases.—2.8 per cent. of children were found suffering from actual skin diseases, which by treatment was reduced to 1.7 per cent.

In addition 26 per cent. were found unclean, which figure was reduced to 6.4 per cent.

The general state of the Simla school child in regard to cleanliness, is now very good.

In England and Wales, it is estimated that 16 per cent. of children suffer from verminous conditions of head and body, 9 per cent. from scabies and 10 per cent. from other skin diseases.

Ear diseases and defective hearing.—2.7 per cent. suffered from ear diseases and defective hearing, by treatment this figure has been reduced to 0.55 per cent. It is estimated that about 2 per cent. of children in England and Wales suffer from these conditions.

Girl Schools.—During 1926, the system has been extended to all the girls' schools at Simla. This work is voluntarily carried out by one of the Lady Doctors of the town and in consequence it is regretted the examinations have not been as regular as in the case of the boys' schools.

To ensure the success of a system, such as that described above, strict supervision is undoubtedly necessary.

One argument against the introduction of such a system for a large city in India is that the large numbers of children would necessarily entail the employment of a costly inspecting staff. From the writer's experience, one intelligent doctor could readily handle 5,000 boys, provided the schools are not too scattered.

Others say that as education is not generally considered compulsory, therefore only a small proportion of the children of school going age would be dealt with.

From a recent census taken at Simla, it is estimated that, with the exception of about 60 boys, all children between the ages of 6 and 11 years attend school.

The Simla Municipal Committee has approached Government, and has recommended that primary education may be made compulsory at Simla.

It is further estimated, that 63.2 per cent. of all boys of school going ages, up to 18 years, attend at Simla.

In consequence, the above system at Simla now deals with practically all boys between 6 and 11 years and the greater proportion of boys of other ages up to 18 years of age.

In conclusion therefore it may be said, that although a feeling of dismay exists generally in India on account of the present neglected position of this work, yet the Simla Municipality congratulates itself that school medical inspection for boys at Simla is equal to that of any town in the West.