

A letter to N.W. Senior, Esq., one of Her Majesty's Commissioners for inquiring into the state of public education, explanatory of communications and of evidence on half school time teaching; on the military drill, and physical training; and on the administration of funds applicable to popular education / by Edwin Chadwick.

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EDUCATION COMMISSION.

A LETTER TO N. W. SENIOR, Esq.,

ONE OF HER MAJESTY'S COMMISSIONERS FOR INQUIRING INTO
THE STATE OF PUBLIC EDUCATION,

EXPLANATORY OF

COMMUNICATIONS AND OF EVIDENCE ON HALF
SCHOOL TIME TEACHING;

ON THE MILITARY DRILL, AND PHYSICAL TRAINING;

AND

ON THE ADMINISTRATION OF FUNDS APPLICABLE
TO POPULAR EDUCATION;

BY

EDWIN CHADWICK, Esq., C.B.

(Pursuant to an Address of the House of Lords, dated 25th June 1861.)

(The Lord Monteagle of Brandon.)

M15485

1861.



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LETTER TO A. E. HENNING

THE UNIVERSITY OF CHICAGO

CHICAGO, ILL.

DEAR MR. HENNING:

I have just received your letter of the 15th.

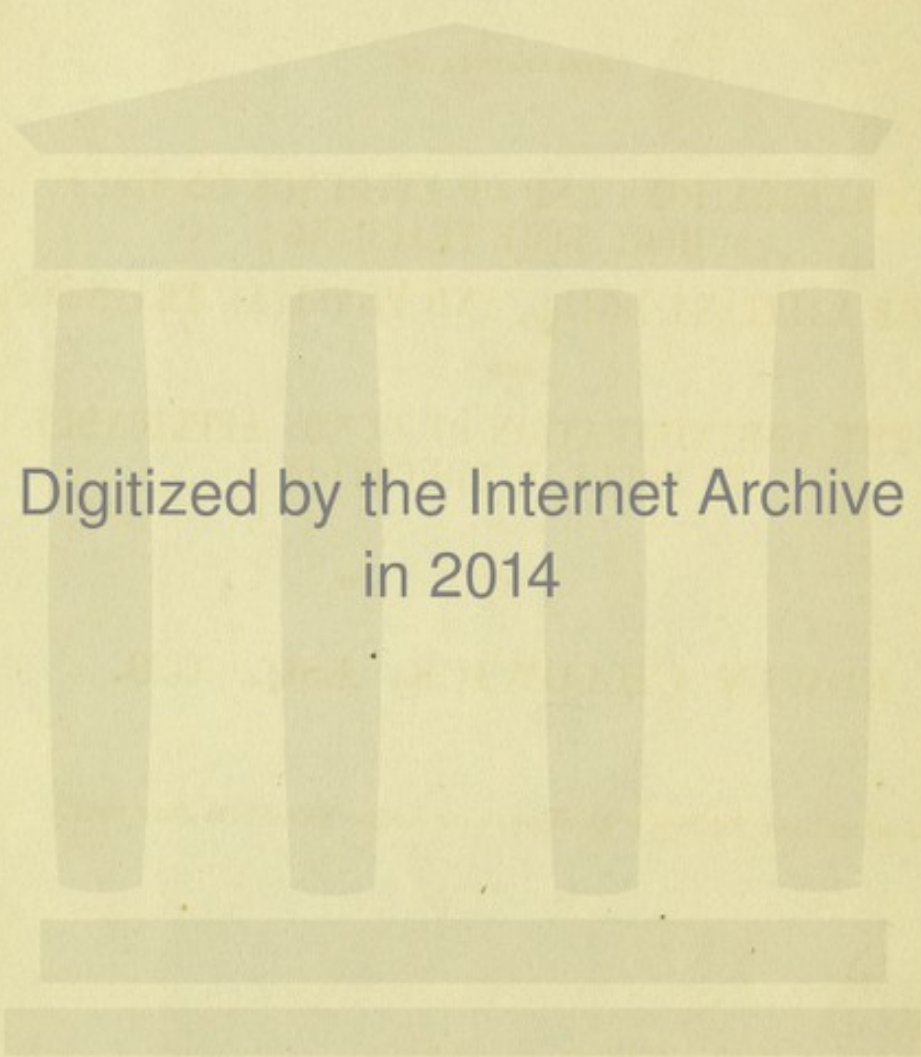
I am glad to hear that you are interested in the

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CHICAGO, ILL.

Yours very truly,

ROBERT H. LYNN



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Ordered to be printed 2d July 1861.

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A LETTER TO N. W. SENIOR, Esq.

ONE OF HIS MAJESTY'S COMMISSIONERS FOR ENQUIRING INTO THE STATE OF PUBLIC EDUCATION

IN THE COUNTY OF ...

IN THE YEAR ...

...

ON THE MILITARY DRILL AND PHYSICAL TRAINING; COMMUNICATIONS AND OF KNOWLEDGE OF HALL; SCHOOL TIME TEACHING;

...

...

OF THE ADMINISTRATION OF PUBLIC EDUCATION TO POPULAR EDUCATION;

...

EDWIN CRADWICK, Esq., C.B.

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LETTER TO N. W. SENIOR, ESQ.

DEAR SENIOR,

In transmitting to you for the information of your Board the evidence I have collected in aid of your inquiry, I beg to submit through you the explanations which I feel to be necessary as to its scope and bearings. And first as to the circumstances under which the collection was commenced.

A paper having been expected from me when acting as a Vice-President of the Education Section of the Association for the Promotion of Social Science, to be read at the meeting held at Bradford, I prepared the heads of one involving an exposition of the Short or Half School-time system of instruction, and of the need of reducing the common school hours, and of using the hours freed for systematised physical training, by means of the naval as well as the military drill for boys, and appropriate gymnastics for girls. I submitted to you the heads of that paper; and you wrote to me that, having read them to the late Mr. Jelinger Symons and other educationists, you all concurred in opinion that the principles involved in them had a bearing, the importance of which could not be over-estimated, on the objects of the Commission. You suggested that I should withdraw the paper from the Association, and collect as full and recent information as I could on the chief topics, and give in the whole for the information of your colleagues. With this request I have diligently, and at some sacrifice, endeavoured to comply.

I have visited all the chief Half or Short-time schools, and all the chief schools of mixed bodily or industrial training, and Short School-time teaching, comprising the chief district Poor Law schools in Lancashire and the chief of those at Bradford, and those in and near the metropolis.

I have also visited some of the chief training schools and the model schools in Scotland and in England, and have obtained the testimony of successful school teachers

on the physical and psychological limits of children's capacity of attention.

Inasmuch as the application of the principles involved depended on local administrative arrangements on an adequately large scale, as in the Poor Law district schools, I have thought it necessary to examine one example at least of a voluntary adoption for national school children and other children of the independent classes, of the administrative principle displayed in those district, orphan, or pauper schools; and for that purpose I have visited and examined the voluntary school union of the chief educational means in eleven parishes, including the town of Faversham in Kent, and its immediate neighbourhood, to which my attention has been directed by Mr. E. C. Tufnell and the Rev. Mr. Grant, Her Majesty's Inspectors of Schools.

I was led to entertain the expectation that I might have assistance, as for a very special inquiry, and I began and proceeded on that presumption. I obtained the information in an approved form, as I was accustomed to collect it, and submit it to you, with our colleagues of old, viz., of deliberately framed questions read to the informants for their best attention, and answers deliberately dictated, and afterwards, in the more important instances, maturely reconsidered and corrected by them. I have sent to you for the Commission most of the information as my opportunities enabled me to collect it.

I regret that the earliest portions sent in should be late for your purposes, and should only arrive as your report was in progress towards completion; but I may remind you that when applied to at the outset of the Commission I gave particular suggestions that the Half School-time system involved a primary organic principle, which the educational conference held under the auspices of H.R.H. the Prince Consort by resolution agreed with me in considering required a very special examination, and you included the topic with others in your instructions to your Assistant Commissioners.

I endeavoured to ascertain, through you, the character and extent of the information which had been already sent in to the Commission on the Half-time question, with other elementary topics; because if that information had been to any fair extent correct or complete, I should have been glad to have saved my own labour, for which I have demands, and am in arrear, for other public objects.

But I could not learn that those topics had been touched

upon, except slightly, and as mere accidents of some non-essential methods, instead of as large primary organic principles affecting all the general schemes of popular instruction. I found that the chief school teachers of the largest practical experience, and therefore the best witnesses on those subjects (except in one instance, and that most insufficiently, as his own subsequent testimony will show,) had not been questioned upon them. I could not learn that it had occurred to the local inquirers, or that any attempts had been made by them, to ascertain the profitable duration of the powers of infantile or juvenile mental labour, which school inspectors, as well as school teachers, have declared to me they conceive to be of primary importance to have clearly defined and determined.

I believe that the great difference in time and expense in the application of educational power in teaching on a small scale, as compared with teaching on a large scale, has not been clearly ascertained or even touched upon as an administrative question, though it will be seen that it is a large and fundamental one, and that it governs the question of the gain in efficiency obtainable by the combination of the local educational means, and by the division of educational labour. Neither, as I believe, has the Commission yet had brought before it any medical or other testimony as to the great and growing evils, including the deterioration of a large proportion of the female as well as the male population, from the neglect of early infantile and juvenile physical training, and from inordinate sedentary restraints in school, and from the bad sanitary arrangements of schoolhouses. Nor could I learn that the private as well as the public uses of the naval and the military drill, nor the specialities of the middle classes, or the specialities of the lowest classes of all,—the hereditary mendicants, paupers, and delinquents,—had been duly displayed before the Commission.

A perusal of the information, as I have collected it, from witnesses of the largest experience, taking their testimony in the order of the topics, will show how far I may have been misled in my efforts to avoid troubling the Commission or myself with matter which had been previously sufficiently dealt with in the communications to them, or which is not of essential importance.

I rely mainly on that testimony, whilst, in vindication of my own opinions in its selection and on the elements

involved, and indeed to forewarn for scrutiny against any undue bias on my own part, I beg of you to represent that my attention to educational topics has not been of yesterday, and that I have been in positions to observe and consider of the subject of popular education, and to collect special testimony from several important aspects. As it is, I have to submit with the information I have been led to collect upon renewed investigation, my own testimony as a witness on some questions of administration, which my experience suggests as applicable to the public service for the attainment of the ends in question. I prefer addressing the Commission through you, that I may appeal to you to bear witness in vindication of past preparations for legislation,—such vindication being of public service for the future, as showing that however clear and important may be the principles and the means of educational improvement evolved and established by the present inquiry, they will, like the results of previous extensive inquiries and preparations, fail of their due and complete application, unless there be a better consideration and adoption than heretofore of the administrative principles and means elaborated for the purpose.

The question of popular education, I need not remind you, was laboured at by both of us more than a quarter of a century ago, under the authority of the Poor Law Commission of Inquiry.

Under that Commission we were confronted with large masses of hereditary pauperism, the chief preventives of which we were led to conclude must be an improved industrial training, and moral and religious education. You will remember that the information then collected was deemed by our lamented chairman, the late Bishop of London, Dr. Blomfield, so important that he was anxious that it should be made the subject of a special report.

He at once accepted the position (which we have since been precluded from the means of impressing upon the public, and thence upon the legislature),—that dealing primarily with the adults was dealing with secondary measures, and dealing only repressively and imperfectly; but that to deal preventively, and eradicate pauperism, we must by general measures deal primarily with the training and education of children. At his anxious instance, as you may remember, we indicated this view in the conclusion of our Report, and stated, “We believe that if the

“ funds now destined to the purpose of education, many
“ of which are applied in a manner unsuited to the present
“ wants of society, were wisely and conveniently em-
“ ployed, they would suffice to give all the assistance
“ which can prudently be afforded by the state.”

The investigation of the entire parochial administration included that of the parochial educational and other charities, which fully justified this large but hitherto (from no fault of ours) fruitless conclusion.

But we had then ground for trusting that a commencement of a sound and efficient educational reform would be made by acting on the principle we established, that children must be treated by themselves in separate houses, which we grounded on the failures of previous attempts to give a moral and industrial training to children under the same roof and under the influence of the indolent and the immoral, *i.e.*, the greater proportion of the adult, paupers.

Under the Constabulary Force Commission of Inquiry into the state of crime, in my own investigations I met with the cases of large bodies of juvenile mendicants whose condition appeared to be hereditary, as also an increasing amount of juvenile delinquency, the correction of which is popularly sought in reformatories, but the means of the prevention of which would be found in the development of our proposed general measure of district industrial schools, concurrently with an improved administration of old principles of law by the action of a new police.

Under the Commission of Inquiry into the labour of young persons engaged in the manufactories of textile fabrics, I with my colleagues met with conditions which, while they excluded large proportions of the rising population from almost any effectual religious or moral education, tended to ruin them bodily.

My colleagues of that Commission agreed with me in declaring, upon adequate medical testimony, that even ten hours' daily continuous labour for little children, as implied in a ten hours' bill, was too long; and my colleagues proposed, as a compromise, a limitation to eight; — but being individually charged by the Government with the preparation of the bill, I inserted provisions for a limitation of children's labour to six hours, and it was really a six hours' bill which was carried through the House of Commons, together with the condition of em-

ployment that every child employed should be three hours a day under a competent school teacher, and with a rating clause for providing sufficient schools and school teachers where none were found to exist. The three hours or half school-time provision was intended not solely as a security for education, which my own educational information and superior testimony enabled me then to say was as much time as could be occupied profitably with any subject matters of instruction with very young children,—but as a primary security against overwork; inasmuch as if we secured their presence in school for three hours, we prevented their presence for that time in the workshop, and we cut off that amount of time from any adult stage of work to which they would otherwise be subjected. The principle laid down was, that working young children during the same stages as adults, and which suffice for adults, is always injurious overwork for young and growing children, whether the work be mental or manual. The three hours' compulsory attendance at school, even where the teaching is inferior or nominal, has been successful as a preventive of bodily overwork; the effect has been an improved physical growth, as medical officers attest, and also an improved quality of labour during the reduced hours,—as employers admit. But the securities for the competency of the school teaching and the rating clauses having been thrown out in the House of Lords, the education given has been extensively nominal and illusory, and often fraudulent. From officers who have seen only the failures, the majority of cases, you will get testimony that the half-school time is an utter failure. There is also a body of one-sided testimony which entirely overlooks the half-school time provision as a security against overwork and bodily deterioration. But where, by voluntary exertions, the half-school time teaching has been provided of a proper quality, as by intelligent manufacturers, such as the Messrs. Walkers of Bradford, Mr. Ackroyd, the Messrs. Ashworths of Bolton, Mr. Bazley of Manchester, the Messrs. Chadwick of Rochdale, the Messrs. Birley of Manchester,—or where there have been schools under trained masters to whom the “half-timers” have been sent, as at Oldham, Rochdale, Manchester, and elsewhere, or where, as in the Poor Law district schools, the half-time system has been carried out otherwise,—there you have such testimony as I have adduced, and as may be extended from experienced school

teachers, of practical results which affect the whole of the prevalent practice of infantile and juvenile education and training. I have no statistical information of my own to measure the precise extent to which the principal particular provisions of the Factory Act might be made available for other trades; but I may cite the opinions of the Rev. Canon Moseley, as having the widest educational experience as a school inspector. In his report on male training schools in 1854, p. 304, he states,—

“ It would be the first result of the Half-time Act, if
 “ its provisions were extended to the whole community,
 “ to send to school upwards of two millions of children,
 “ whose life is now spent in idleness; and in the rest to
 “ double the number of children at present employed in
 “ remunerative labour. For the children now so em-
 “ ployed all their time would then have to go to school
 “ for half of it, and would have their places during that
 “ half time supplied by others who are not now at work.
 “ Thus a large portion of the idle street children of great
 “ towns would find work, and all of them education. To
 “ drag the demoralization and misery of these poor chil-
 “ dren into the light of the school would, of itself, do
 “ much to remedy them.”

With this prefatory explanation of the origin of the half-time system of instruction seriously applied to the district pauper school as well as in the factory, I would submit the evidence collected as to its working as involving in the better application of its principle, the prevention of two great sources of evil inflicted on the population in the infantile and juvenile stages; 1st, as relates to the poorer classes,—over bodily work and under mental work; and, 2ndly, as relates to the middle classes,—over mental work, over sedentary work, and under bodily work, *i.e.*, deficient physical training.

Under the Sanitary Commission of Inquiry I had, with my colleagues, to investigate other conditions of mental and moral as well as physical deterioration,—conditions important to be known as serving to define what grants for education cannot do, as well as what they can do.

Observing that in Parliament one piece of statistics has been taken and assumed as a test of educational power and progress, namely, the proportion of births out of wedlock to those in wedlock, I stay to remind you that we found that one of the evils arising from the law of parochial settlement, which on wide evidence we strongly con-

demned, was that the owners of close parishes, to throw off from themselves chargeability to the poor's rates, not only refused to build cottages for the accommodation of the increasing population, but pulled down cottages already existing, and drove the inmates into villages or towns already overcrowded, and thus often forced two families not only into one cottage, but into one room. It was the theme of frequent exclamation by the late Bishop Blomfield, that no known form of education could be made effectual for teaching decency and chastity against conditions which heaped the young of both sexes, the married and single, into the same beds as well as into the same rooms. When we examined those conditions, the surprise would frequently be that traces of the moral virtues inculcated in schools were ever to be found amongst the population subjected to those evil results of vicious legislation. From the accounts given of the moral results of improved education, deduction must be made of those who return to the demoralising physical conditions aggravated by the law of parochial settlement.*

With the exception of such evil physical conditions, I apprehend that from whichever point of view the more prominent evils pervading the lower classes, *i.e.* pauperism, private as well as public,—the pauperism of useless and excess of dependent hands of the middle as well as of the lower classes,—mendicancy,—crime,—physical deterioration, are investigated;—all these evils display the deficiencies of early training, and the absence or the defects of primary education, as a general source, and their remedy, improved training, bodily as well as mental, the proved efficient means of prevention.

—One of the administrative means is that of consolidation for the purpose of spreading establishment charges over large numbers, and, by a division of educational and of other administrative labour, obtaining increased efficiency without increased expense of teaching power.

* *E.g.* "Near one of the schools which I have visited," says the Rev. D. J. Stewart, "in Newcastle, there are some thousands of the poorer class of people living in dens of corruption, which no one, probably, would visit from curiosity alone;" and in these wretched abodes there is a considerable "juvenile population exposed to those noxious influences which infallibly produce demoralization; overcrowding of families, with its unavoidable result, the intermixture of both sexes and all ages, parental neglect and vice, utter ignorance, unbridled licentiousness, brutal intemperance, destitution, filth, corruption, and misery."

This was provided for in the original project of industrial district schools; for when we had explored the extensive failure of the Poor Law parochial school teaching,—when we found the case which Miss Nightingale mentions, of an old man who was appointed as a village schoolmaster because “he was past minding the pigs,”—commonly exceeded by the appointment, on the score of economy, of wretched adult paupers, who were past courses of active vice and profligacy, to give to orphan and destitute children in the parish poorhouses religious, moral, and intellectual culture,—the failure or ruin in life of the majority subjected to such treatment was accounted for. But if we had had the power of appointment, where were 16,000 superior and competent masters to be found as substitutes for them, even if the highest school teaching could have availed for moral training against the vicious inmates of the parish poorhouse with whom the children must have associated? You are aware that I bent my efforts against the ignorant theory implied in the old parochial administration, of the single parochial officer, whether paid or unpaid, and if paid, of the highest intelligence and virtue, being obtainable at a rate of remuneration not much above that of a common labourer, and it was then proved that efficiency was only obtainable with economy by a subdivision of labour among a staff of well qualified and paid officers. It followed on the same administrative principle of aggregation of the subject matters, for their segregation or classification and separate treatment, that efficiency and economy of educational as well as of simple administrative power was only obtainable by sufficiently large aggregations of children for classification and treatment by a division of labour amongst a class of teachers. Even such aggregations as Poor Law unions are frequently too small to afford more than a single competent first-class respectable schoolmaster and a single competent and respectable schoolmistress. But neither the single schoolmaster nor the schoolmistress could be at once infant school teachers and teachers of the older classes,—teachers of trades, and of gymnastics, and of the drill. Only the still larger aggregations of the larger schools in separate buildings, such as are provided for in the separate new houses for districts of unions, would enable a sufficient classification to be made for an efficient and economical treatment, by a subdivision of teaching labour. By these larger aggregations, and the administrative subdivision of the labour of teaching, combined with physical training; by the drill, and industrial occu-

pation, together with the half-school time system of book instruction, larger moral and mental results have been obtained, and more conclusive demonstrations of educational power gained than by any other methods of which I am aware, and far greater than we might reasonably have expected. The moral results may be thus stated: Whereas formerly under parochial management and tuition by single untrained masters, and unsystematised book instruction, solely given for long hours, scarcely more than one-third of the pupils were found in honest and productive occupations, the rest remaining dependent paupers, or being at large and living on the public as mendicants or depredators;—now, in the efficient larger separate or district schools, and half school time, with physical training, the failures and the returns of pure orphans from places of work on account of simple misconduct are proved, upon close inquiry, not to exceed two per cent. I say cases of simple misconduct, and in respect to the females and of “pure orphans,” because a large proportion of the children received in these institutions are partially idiotic or scrofulous, and subject to congenital taints and irretrievable bodily and mental disablements, and because these and the cases of the daughters of prostitute mothers returned to their parents, cannot fairly be charged as failures of the system of school teaching. Under fairer circumstances of combined bodily and mental training, the proportions of moral failures are so few as almost to be set aside as inconsiderable. This is, I apprehend, when fairly examined, entitled to be considered as a triumph of educational power, and one of the greatest results for social science of our time. The best exposition of the conditions of its attainment is to be found in the well-weighed, practical, and comprehensive testimony of Mr. Tufnell, which I have submitted herewith. My own observations enabled me to anticipate with confidence his answer to the following large question, put to him on his previous experience and observation, now for more than a quarter of a century:—

“Does your practical administrative experience enable
 “you to say that with full power as to the means, you
 “can ensure with confidence the general production of
 “the like educational results of the half-time schools,
 “with the drill and industrial training of the district
 “schools, in ensuring fitness and general permanence in
 “productive employment of children of the vagrant and
 “pauper classes, as well as of others?”

“Yes, if I am given charge of such children, I can with

“ positive moral certainty ensure of the class that as a class they shall never be vagrants or paupers again. This I can undertake positively.”

I will not stay to reassert, after extended demonstration, the tremendous penalties to which society has been subjected, by the dereliction of the administrative principles of the subdivision of educational labour provided for as of general application in the report of 1834, and so earnestly supported. But I venture to assert, not on the authority of persons whose knowledge is by hearsay, casually collected, or whose practical observation has been bounded by the four walls of an office, but on the testimony of official persons who have observed the children themselves and dealt with them practically under varied conditions of administration and application of educational power; on such authority I assert that the conversion of the children of hereditary paupers, mendicants, and delinquents into self-supporting and productive labourers and good subjects, may be effected with the utmost certainty. Nay, the late Mr. Aubin, of the Central London District School, who has had passed through his hands some thirty thousand children of this class, expressed a confident opinion to me, that upon the data already obtained, a contract might be made for the attainment of greatly advanced moral as well as intellectual results from the improved physical and short school time mental training, that is to say, if they were pure orphans who could be kept by themselves and not be reclaimed by vicious relations.

These results of educational and training power, I submit as of the highest order of moral and commercial progress and importance; but with a higher class of pupils, and the highest class of public school teaching and training, the results obtained are still greater. I cite the following examples of statements reported from time to time, in respect to pupil-teachers, by the Rev. Mr. Brookfield; thus, in his report from the South-eastern district for 1848-49, he states that of the pupil-teachers, there were,—

	Boys.	Girls.
“ Disallowed stipend, and erased for incompetency - - - - -	1	0
“ Disallowed stipend, and erased for misconduct - - - - -	2	1

“ Besides these, two girls have been allowed only half stipends, in consequence of defective attainments; one girl has voluntarily withdrawn from the apprenticeship;

“ and two boys and two girls, very promising young
 “ persons, have been removed, I am grieved to say, by
 “ death. So small a number of defaulters for misconduct,
 “ only three out of 300 youths between the ages of 14
 “ and 17, would be indeed incredible, if our pupil-teachers
 “ had been “merely clever” boys and girls; nor do I think
 “ if such had been the case, that any imaginable amount
 “ of lax indulgence could have kept down the number of
 “ dismissals to so scanty a proportion. But when it is
 “ remembered that in every individual case, and every
 “ year, the clergyman’s certificate of good character and
 “ conduct is peremptorily exacted, very few will have the
 “ intrepidity to impute this inconsiderable list of degrada-
 “ tions to a lax regard for moral requisites, considering
 “ that that charge must ultimately trace its way to a
 “ quarter where it would be surely most unrighteously
 “ misplaced.”

Again, later on he says, in his general report from Kent, Surrey, and Sussex,—“ I turn with very great
 “ pleasure to the next column (M), which records that
 “ 310 apprentices in my district have received their
 “ stipends for the past year upon my favourable report
 “ on their good conduct and attainments, backed by the
 “ approbation of their clergy. Nor is this pleasure
 “ materially diminished when I advert to the two succeed-
 “ ing summaries (N and O), from which it appears that,
 “ while two have forfeited their payments for deficient
 “ attainments, and two for dishonest copying, of the 24
 “ whose apprenticeship has terminated, nine have been
 “ promoted to Queen’s scholarships, or to other advan-
 “ tageous appointments under circumstances highly
 “ creditable to themselves; six have been removed for
 “ incompetency; five, I am grieved to say, by death or
 “ illness; but only three through causes morally dis-
 “ creditable to themselves, and even these not of a very
 “ heinous character.”

Another year follows with testimony of the same tenor.

I made particular inquiries at the chief training colleges in Scotland, on the same point, as to the proportion of failures to the extent of disqualification for employment, and I found that they closely corresponded with the above, and that, as respects females who were under supervision until the 25th year, when a large proportion of them entered into the married state, such failures were within one per cent. In Scotland, and in England, in some establishments for orphan children, I found that the whole of those

who had left had been kept under view, and could be accounted for as in good employment for long periods without a single known failure, except from sickness and death ; a source of failure which I can confidently anticipate that the due application of sanitary science and an improved physical training will greatly diminish or remove.

Those who are conversant with statistics will be aware of the allowances with which these and the like statements of results are to be received, but they will at the same time appreciate their substantial importance. Those who are acquainted with domestic life amongst the highest and best educated classes in England, and how few families there are with several sons, who are exempt from the painful failure and dependence, and the known or concealed disgrace of some one of them, will be qualified to estimate justly the progress made in elementary education, and the advanced position and desert of the trained elementary school teacher. His art even in its present condition suffices for all fair immediate demands upon it ; the defaults, as to its due and extended application, are now at the door of the legislator.

It is to be observed that the moral results are obtained in the latter class of cases by aptitudes for which bodily training is perhaps the least necessary, though more important on many accounts than is commonly supposed ; but a considerable share of the moral success of the district half-time and other half-time industrial schools for the lowest class is due to aptitudes for labour, imparted by the drill and physical training, and the habits of obedience, attention, order, and efficiency imparted by that training.

In the inquiries into the state of crime under the Constabulary Force Commission, I endeavoured to promote close inquiries by prison chaplains and others into the antecedents of criminals, and especially of juvenile criminals, and how they were first led into crime. One frequent complaint by runaway apprentices and vagrant children was that the labour to which they were first put was really extremely painful to them, and more than they could bear. Fairly examined, it is found that there is, under common conditions, much truth in these statements.

Continued bodily exertion even to adults who have been previously unaccustomed to labour, is for a time painful to them. At the commencement of some handicrafts the labour in them is peculiarly painful to boys who have had no regular bodily exercises or physical training.

The longer time boys are kept at the common school engaged in long hours of exclusively sedentary occupation, the greater is their inaptitude and the pain at the commencement of sustained labour;—the longer the commencement of regular bodily exercise and moderate labour is delayed the more severe and repulsive such labour is.* Any previous regular bodily exercise, such as that of the military drill, or the pulling of ropes and the climbing of masts of the naval drill, gymnastics, and regular bodily movements, are in themselves preparatives for regular labour, rendering it less painful and repulsive, or even making it agreeable at the commencement. Boys who have undergone the mixed naval and military drill during their school period have also been taught prompt obedience and concurrent action, and as a class they take to regular labour at once and cheerfully. Such preparation may begin at the fifth or sixth year, and be very far advanced by the tenth or eleventh year, when children are in a mental as well as bodily condition for the commencement of some productive employment.

I do not presume to deal with those higher considerations which properly belong to the theologian, and I would direct attention chiefly to the financial considerations which come more exclusively within the province of the administrator.

I believe that you and Mr. Mill, and most of the members of our political economy club, concur with me as to the economical elements involved in a sound public education, some of which I may thus exemplify. The common average expense of a child from infancy for food and clothing cannot in any district be put down at less than 2s. a week. At 14 years of age he will have cost 70*l.*; but at the ordinary expenses of well-managed unions he will really have cost more than double that, or 4s. 6*d.* per week; and at 15 years of age he may be considered as an investment of 180*l.* of capital, (and it would be to his advantage if he were taught to consider himself as an investment, to be carefully economised for production, and were really so considered by others). If from that period he remain a pauper, there will be thenceforward a loss of the return of wages necessary to replace the cost of his subsistence, and also a loss of the profit or payment to the capitalist his employer. If the boy turn mendicant, he will thenceforward not cost less, but generally more, to

* *Vide* Mr. Paget's evidence, p. 88.

the community, though the cost will be differently levied. If he turn thief, he will be maintained by the community far more expensively, for he will be maintained in jail. In whichever condition he may live, as pauper, mendicant, or depredator, in prison or out of prison, the loss to the community for the remainder of his life, which from the adolescent stage, would, according to the insurance tables, be about 40 years, would not be less than about 400*l.*, in addition to the original outlay during the infantile and juvenile stages. In the educational conditions which prevailed generally with the pauper children under parochial management, and which still prevail extensively under the independent union administration,* only one out of three orphans become productive members of society, and the loss of capital to the public is not less than 800*l.* upon every three orphan and destitute children reared. These educational failures, or the creation of those future subjects of penal administration correctly characterised in old English as "Wastrels," still goes on from the default of legislative principle at the rate of many thousands per annum. The economical elements involved in the improvement of the quality of the common elementary education may be specified; First and foremost as regards the labourer himself chiefly; if he be a high waged mechanic, the saving of the enormous waste from the misapplication of his own wages, forming in the national aggregate a large proportion of sixty millions expended chiefly by the labouring classes in spirits and stimuli which they would be better without. Next as regards his employer and others, saving of the great excess of time occupied by the ignorant in learning trades or new processes; saving of the losses from clumsiness and the misdirection of force; saving of the loss of capital, or of waste from negligence or depredation; saving of the extra labour of superintendence required by mental as well as moral untrustworthiness. "I would not," declared an eminent and successful manufacturer to me, "take less than 7,000*l.* for my whole set of workmen in exchange for the uneducated, ill-trained, and ill-conditioned workmen of the manufacturer opposite. We find that the steadiness of the educated men induces steadiness of work, and comparative certainty in the quality and quantity of the produce." "Why do you bespeak

* *Vide* Mr. Tufnell's evidence.

“ children from the infant school, as a class preferably to “ others?” an operative was asked. “ Because they require “ less beating, and they are sooner taught,” was the expressive answer. By advanced agriculturists the like testimony is given of the superior economy of trained and educated over uneducated and ignorant labourers. Why do you prefer trained and educated men as private soldiers? was a question put some years ago to superior and experienced non-commissioned officers, whilst adverse opinions were reported from general officers. “ Because “ they are more obedient, more cool, more steady under “ fire, less liable to panics, and a smaller number are more “ to be trusted,” was the general answer. And Sir John Burgoyne and other military authorities maintain that one educated soldier, as a sapper and miner, is as effective for the purpose of war as three ordinary soldiers of the line. Experienced naval commanders have testified to me that they would work vessels more safely and satisfactorily with from one-fifth to one-fourth less number of hands, if all were as moderately well-educated and intelligent as some few of them are. The evidence, of which I have adduced examples, as to the difference between drilled and undrilled labourers, establishes the conclusion, that by physical training, and by the naval and military drill alone and apart from its value as a preparation for war, four drilled men may be made as efficient for the purposes of ordinary civil service and productive industry as five undrilled men, or more; that is to say, that by an outlay for training power,—as will be seen, of little more than one pound per head, a fifth additional value will be given to every labourer in after life; or regarding the subject collectively, at such a rate of expenditure, an addition equivalent to the produce of the labour of one-fifth more of population, without the expense of additional food, clothes, or shelter, to maintain them.

If a due examination and estimate be made of how much of the national wealth is due to the additional efficiency of so much of the general labour as is imparted by the very imperfect elementary education now given, if an estimate be made of the vast waste from ignorance, it will be seen that to restrict any public expense which is really necessary to ensure a sound elementary education for the whole of the population, is to economise the means of economy on the largest scale. To the question

frequently put, where the public grants for elementary education are to stop? the answer may be given, "Where waste stops, where profit in results ceases!" The most wasteful element is niggardliness in the disguise of economy, which, looking no further than immediate payments, especially for school teaching, deems all service cheap where the pay is low. Alarm at increased educational expenditure, assuming the expenditure to be well applied, is really alarm at the diminution of waste, and at the increase of productive power. The adverse feeling and false economy which passes, as a matter of course, and without dissatisfaction, an expenditure of two millions per annum on penal administration, with only a partial repression of crime, which goes on with an excess of nearly an equivalent amount for the relief of pauperism, of crime and pauperism utterly preventible by an improved training and education,—which neglects or refuses to correct the misapplication of an annual income of nearly a million per annum derivable from educational charities; which yet begrudges and would stay an annual expenditure of three-quarters of a million, that influences directly the future productive power of at least one-third of the population, is surely akin to the economy of the Welsh farmers, who rebelled against the payment of a sixpence as a toll, by which sixpence three sixpences were saved in horseflesh; those farmers not being in the mood to care, or of the capacity to understand, whether by an improvement in the construction and direction of the road the economies might be raised from sixpences to shillings. If the two-thirds of the schools and children now out of any responsible supervision could only be improved by the existing agency of the Privy Council, even then a threefold grant to be administered by a threefold establishment, would be a sound public economy. The real ground of alarm is, the misdirection of the present and the future private and public expenditure under erroneous administrative principles.

I proceed to point out some of the economies derivable by an increase of efficiency from an administration on sounder principles than those at present in common operation.

The experience of the short school-time district industrial schools as displayed in such evidence as that which I have collected and transmitted is demonstrative of a general conclusion that by the administrative division of educational labour the elements of popular educa-

tion, reading well, with some skill in parsing, writing a fair hand, spelling well, arithmetic up to decimal fractions, the naval and the military drill, and vocal music may be taught well, together with the elements of religious instruction in, about one-half the time now commonly occupied in teaching indifferently the three elementary branches, as they are considered, of a popular education. It is found that, beginning with the infant school, these courses of mental and bodily accomplishments may generally be completed soon after the tenth year. Whereas under the present practice school attendance is required until the thirteenth year for the communication of an inferior amount of book instruction alone. The practicability of the reduction by one-half of the ordinary period of teaching is established by the evidence of the most successful school teachers, to some of which I must in answer to objections subsequently and particularly advert.

The gain in time from six or five to three hours of daily school attendance, and from six to three years,—half the term now commonly occupied,—is not the sole or the most important gain achieved in the large separate schools by the division of educational labour and the application of the half-time principle. A boy who has acquired the same amount of knowledge in one-half the time of another boy, must have obtained a proportionately superior habit of mental activity. This is the experience stated by employers of labour in good half-time school districts, who have ceased to employ “long-timers” where they can get the “short-timers”; and it is this quality of superior mental alertness, combined with the bodily aptitudes created by the previous drill, which has given the comparatively stunted pauper boys of the towns the preference over the strong robust lads from the coast. The mental habits of listless attention, prolonged beyond periods in which it is psychologically possible to obtain voluntary and profitable attention from children,—the mental habits of “dawdling,”—of listless waiting, which the common school teaching during long hours communicates, are highly pernicious, and economically wasteful, more especially for those who have to gain their own livelihood, and such idle mental habits commonly lead to vice and misery in after-life even on the part of those who have not.

The division of educational labour by trained teachers in the district schools and in the larger public schools

founded on the same principles, beats, as might be expected, all small schools which have only single masters, however competent; and it beats all the common elementary instruction for the middle class, or, indeed, the instruction in the older schools for the higher classes.

No such proportion of the boy pupils who have gone through the course of instruction in a half-time district pauper school could be plucked for bad spelling and bad cyphering as have been plucked of young gentlemen candidates for direct commissions in the army. I have had the pauper children in these schools tried with the questions proposed to candidates for clerkships in the War Office, and as large a proportion of clever answers were got from these boys under 13, as would probably be obtained from the older actual candidates for clerkships.

The younger Eton scholars could not stand an examination in the lower elements of instruction with the pauper children who have gone through the course of education in these half-time district schools. No place has been met with where the shopkeeper or a person of middle class rank can obtain for his son as good elementary instruction as is imparted under the subdivision of labour of trained teachers. Yet the amount of elementary instruction imparted to the pauper children is absolutely necessary to ensure the change of their condition into permanently self-supporting labourers.

I shall only stay to state that, in my opinion, any measure of legislation for the improvement of popular education will be wholly inadequate which shall consider and provide for one class exclusively, which shall only retrieve the condition of that one class by purchasing a dead level of elementary education at the expense of the middle and higher classes, and which shall make no provision to ensure any gradations of schools such as the lower middle classes are unable to obtain for their children. Against such one-sided legislation and administration loud and just reclamation may be anticipated.

You will see it proved by the testimony I am prepared to adduce, that next to the gain in time by the division of educational labour in the system exemplified in the district school, is the gain in pecuniary economy.

As by means of a staff of qualified permanent paid officers and a division of labour, with gradations of administrative superintendence in each Poor Law union, there has been effected an average yearly economy of upwards of two millions,—and if the principles which we laid down

had been adopted by Parliament with some additional outlay for qualified paid service, the economy might have been carried to between three and four millions per annum upon the previous expenditure of the unpaid overseer or the single paid officer, the assistant overseer;—so it is proved in the instance of the district schools, that by means of an educational division of labour on the same administrative principle applied by a staff of school teachers, comprising in the best instances the services of a principal with those of a chaplain, a head master at about 200*l.* per annum, first and second assistant masters, and a staff of pupil teachers, drill masters, and drawing masters, an economy of full one half is effected against the single master (even though he be a trained master) teaching on a small scale;—for the expense of the educational power of the trained staff is on the average in the district schools 1*l.* per head per annum. The expense of the competent trained single master teaching on the small scale may be stated to be on the average at least 2*l.* per head per annum; but the economy obtainable by the educational division of labour, as against the ordinary teaching where there is no such division, is to be seen in the comparison of the expense of obtaining the result, or the communication of a given amount of instruction. By the educational division of labour, an elementary education is imparted in three years, or from about the seventh to the tenth year, at an expense of 3*l.*, from the period of leaving a good infant school; or including the infant school teaching, a total expense of 4*l.* 10*s.*;—or including the expense of a special physical training comprising the naval and the military drill, also elementary drawing and vocal music, at a total expense of 7*l.* 10*s.* per head for teaching,* imparting improved productive power, and on the half-time system giving to parents of the wage class an earlier

* This is for teaching power alone. In the face of the proof given in our report of 1834, in which we showed (p. 312) that the attempts to give a moral training to orphan children under the same roof with adult paupers had been failures; and,—pp. 306, 307,—that if separate buildings were assigned to each class of paupers, the existing workhouse buildings might in general be made to suffice; new buildings have been erected, the greater proportion of which is wholly unnecessary. The house rent is often more than one-fourth of the annual charge. In one it is 6*l.* 17*s.* per annum per head of the pupils. In Mr. Moseley's examination, pp. 33 to 36, is given the analysis of the charges for a district school, where a separate old building has been adapted, as intended, and where the expense is 4*s.* 8*d.* per week per head; of which 2*s.* 2*d.* is for food, and 6*d.* for clothing; 6½*d.* for household superintendence, and only 3*d.* a week for the school teaching; 1½*d.* for physical training.

return of wages,—whereas by the single master it is only imparted in six years from the same period, at an expense of 12*l.* for inferior instruction in reading, writing, and arithmetic merely. In other words, I am prepared to prove that by an economical administration of the funds now expended in the small scale of the greater proportion of schools throughout the country, three if not four pupils may be instructed at the expense for improved educational power now incurred for giving the like elements of instruction to one.

Let me recapitulate for consideration the mental and bodily acquirements which may be imparted on the half school time system to the labouring man's child,—to every male child in the country by the time it is usually demanded for some productive service, namely, by about the tenth year. 1. Reading intelligently “with a thorough understanding of the sense of such matter as is given them in the school to read, and with a clear expression of the ideas, with a clear handwriting and habits of the correct spelling of words; in arithmetic to fractions and decimals, with a good understanding of the principles of arithmetic and a general aptitude for applying them.”* These accomplishments would exceed those now commonly only imparted to first class scholars by the thirteenth year. Added to these would be some education of the hand and eye in drawing for handicrafts, and practice in vocal music for psalmody, or an education of the ear; also the bodily training or such aptitude for labour and service as are imparted by systematised gymnastics, including swimming, the military and naval drill, imparted whilst the body is more pliant, much better than it is or can be imparted in after life; and with the drill the mental habits implied by the term discipline,—viz. duty, order, prompt obedience to command, self-restraint, punctuality, patience. With these, with the seeds of congenital disease eradicated, with the body invigorated and somewhat inured, and made apt physically as well as mentally to labour,—thus trained he would enter life with increased assurances of moral and social success, such as have never yet been extensively imparted by public educational arrangements.

Of course the thinly populated districts may not participate in the advantages of administrative consolidation in the like proportion. But by the half school-time

* *Vide* Mr. Imeson's evidence, p. 41; Mr. Moseley's evidence, p. 31; Mr. Simpson's evidence, p. 63; Mr. Allen, p. 102; Mr. Robinson, p. 122.

system, whether applied on half days or on alternate days, the same trained master may be made to instruct a double set of children in different places; and it will be found that there are few places where by the administrative improvement proposed the educational power may not be doubled for the same money.

I have looked at several average urban districts, and consulted experienced school inspectors and school teachers, and other witnesses of wide observation, and (comprising the existing educational endowments for the benefit of the poor), and I am warranted in expressing a confident belief that to effect greater educational improvements than have hitherto been contemplated, and to bring almost the entire population within their scope, additional rates or grants are not needed, but, as expressed in the terms of our report as Poor Law Commissioners which I have already cited,—only an improved administration of the current expenditure, private as well as public, for educational purposes.

In my early investigations of the training of children in parochial schools, I was often struck by finding that although the matters taught,—the books, the methods of teaching,—were closely similar, yet that widely different results in the general success of the school, as tested by the success of the children after leaving it, were attendant in different grades or manners of schoolmasters or mistresses. So much was this so, that on ascertaining what sort of person the teacher was, and his or her bearing towards the pupils, I found that I might to a great extent anticipate the general results of the school. I collect that the subsequent wider and closer observation of the school Inspectors goes to the same conclusion, the great influence of the schoolmaster's or mistress's social position, which commonly involves manner, beyond similar methods of technical teaching. "As I go from school to school," said Mr. Canon Moseley, "I perceive in each a distinctive character which is that of the master. I look at the school and the man, and there is no mistaking the resemblance. His idiosyncrasy has passed upon it, I seem to see him reflected in the children as in so many fragments of a broken mirror." One element commonly overlooked in popular education, is the imitative capacity of children and the need of providing for it, in the very manner and bearing of the teachers, more especially in infant schools, in addition to methods of teaching.

The fact is indisputable of the effect produced on the

children, eliciting greater immediate respect, as well as by involuntary influence, by the higher order of teachers introduced into the schools for the poor by administrative consolidation. Taking the expense of educational power at 5*l.* per head from the entrance at the infant school to the completion of the course of instruction,—looking at the effect produced in the whole character and condition of the pupil in after life, in removing savage habits and softening rugged manners, it is a real waste to begrudge for such advantages any addition which the market value of the service may require to secure teachers of better manners and social position as well as technical aptitudes.

An addition of a few pounds per head is small for the sake of an impress of an improved manner and conduct as a servant or a labourer, or in any other condition through life. Out of the large economies obtainable by administrative consolidation the payments may be gained for a higher order of service. By the administration on a small scale, or by single masters, it is scarcely practicable to obtain teachers of a better social position, or to maintain the present relative position of the single school teachers against the competition of commercial or other demands for service. When the position of a commercial clerk ensures for good service a salary of 100*l.* and 150*l.* per annum, with a prospect of advancement, a young man with the ability of a trained and certificated school teacher cannot be expected to embrace and content himself for life in a position of great responsibility at 60*l.* per annum, or, with a house, at 85*l.*, in a service which is one dead level, without prospect of any social elevation, or hopeful change for himself, or if he marries for his family, for life.* The competition of the open service market, which now

* “A schoolmaster,” says Mr. Stokes, “is expected to be a model of virtue for the imitation of his scholars, vigilant, kind, disinterested, zealous, prudent, patient, cheerful, sincere, and pious; of good attainments, with a talent for teaching, strictly upright in his books and accounts, in the prime of life, yet a settled disposition, possessed of tact and knowledge to form children and please parents; and not one such man is sought for, but two hundred of them. What, then, may be the amount of remuneration offered for qualifications which in this busy age would open so many lucrative careers to their possessor? What is the reward of a prolonged education and years of mental labour? In the summaries appended to this report, I find that the pecuniary emoluments of my certificated schoolmasters, including Government grants, and all professional sources of income, average 69*l.* 17*s.* 4*d.*, and that only twelve of them are provided with homes free of rent.” Others receive more than this, but nearly all less than first-class mechanics in towns.

takes away some of the best teachers, is with difficulty withstood by the expedient of apprenticeship, and is daily becoming more severe.

It is matter of even more grievous complaint in some districts that only those can be obtained as school teachers who are cripples, or have some bodily disablement, or some mental or moral weakness which allows them no prospect of service in the open labour market. Administrative consolidation for the attainment of a subdivision of labour, and gradations of rank, and some more elevated positions for school teachers, is necessary to arrest the continued deterioration of the service, which requires elevation even for simple technical teaching. It is an erroneous common assumption that any one may teach equally or passably well the elementary branches of education, reading, writing, and arithmetic; and it must be impressed as an important principle, that as we simplify and reduce the heads of popular instruction, the skill to be applied in teaching them ought, for mental training, to be augmented. It is in the interest of the poorest classes, and to obtain for their children the best service for elementary instruction alone, that the consolidation should be carried beyond such examples as those I have presented of the district schools and others on the like enlarged scale of instruction, and should comprise gradations of higher schools for the children of the middle classes, of which those classes are pressingly in need.

In an address which I was recently called upon to deliver, when presiding at the Public Health Section at the last meeting of the Association for the Promotion of Social Science, held at Glasgow, I felt it incumbent on me to declare that so much irreparable mischief has been done in consequence of the surrender heretofore in mediæval times of the education of youth to men of the cloister, who trained them up after their own recluse and slothful habits,—that so much evil is still doing by blind routine in courses which ignore the requirements of special training for the body as well as the mind, that it is requisite to assert the claims of sanitary science to consideration in any general scheme of education. I showed, upon medical and sanitary testimony, that full one-third of the children born in rural districts, and the majority of two-thirds of the children born in the lower town districts, have congenital defects, weaknesses or latent predispositions to disease, for the eradication of which an improved physical training beyond that in our best public schools is needful.

The public has yet to be instructed, and its attention directed to the visible signs of bad sanitary condition and neglected physical training. But let any one picture to himself the bright eyes and clear florid complexion, and the irrepressible spirits of a robust healthy child, and with such a standard in his mind let him count the small proportion of children in a town, or even in some rural districts, whom he meets or sees in a school-room who come up to it; and on the other hand, the large proportion of pale squalid faces and complexions bespeaking a low tone of health, he may see the amount of future or present misery for the prevention of which there is need of special physical training. Of the low bodily condition a large proportion is no doubt due to overcrowding and the insanitary conditions of the children's homes; but the frequent outbursts of epidemics, from schools as centres, denote the school as a powerful cause,—the specific noxious influence of which is further denoted by the pallor and the common unhealthiness of the school teachers themselves.

The Rev. Mr. Mitchell, one of Her Majesty's school inspectors, states,—

“There is no calculating the permanent injury that must arise to the health and constitution of children immured for hours in rooms whose air is poison. The ultimate results must remain unknown. Those which we do perceive are constant restlessness and an impossibility of commanding the attention, a sickliness of look in the instructor, and great exhaustion with weariness. The work of teaching becomes a labour and drudgery; energy and life cease, especially in the latter part of the day, and the instruction becomes a nullity. As year after year passes away, the derangement becomes more confirmed, and the result is, that the master loses his activity, his school lacks its success, and too often he retires, with spirit broken, and health infirm, to seek some other field of labour, and complains of the unhealthiness of school-keeping, when, in fact, he should only regret the uncared-for insalubrity of his ill-ventilated and imperfectly lighted room. I know this to be the case from the sensations constantly experienced after inspecting schools so circumstanced; the fatigue and weariness consequent on a day spent in some rooms are intense, from no other cause but this; and medical men, and those who have studied the subject, are well aware of the fact.”

Again, he says, in another report, describing the insanitary construction of common schools:—

“It is a curious fact that, of the pupil-teachers and mistresses who have failed in health, all, with but one exception, have taught in schools thus constructed. It would be hardly possible to produce a more conclusive proof of the baneful effects of

this sort of ill-ventilated and unlighted room. Strangers visiting the school only for half-hours do not feel it, but there is, doubtless, a silent, constant wearing effect, which in time does its work upon the bodily and mental health, and gradually undermines the constitution and the brain. . . . There is a peculiar wild look about the eyes of most teachers in such rooms as I have described; and there is a heaviness and want of energy in the conduct of the school which no physical ability seems able to conquer."

But these evils are not confined to the town schools. Mr. Watkins, the school inspector for the Northern districts, states that doors and windows remain closed in winter, there being no other means of ventilation, and the air which the children breathe is in a state of great impurity. I have found it difficult to stay in schools in which the children have been for some little time previous to my arrival.

"I very seldom," says the Rev. D. J. Stewart, another inspector, "enter a school-room of which I can say that the air is without taint; and I find that in many instances the teachers know it, suffer from it, but yet shrink from the only alternative within their reach, viz., doing their work in a thorough draft. I cannot omit to mention that a great amount of illness among the school-teachers in this district has come to my knowledge during the year. Three teachers are dead, one mistress is still unable to take a school, several have suffered from fevers or ulcerated sore throat, and the health of some students in training who have been apprenticed in schools remarkable for want of ventilation has broken down. I think that I am quite justified, under these circumstances, in directing your Lordships' special attention to the whole subject, for if it can be shown that the conditions under which adult teachers work are prejudicial to their health, it may be taken for granted that the school children have suffered quite as much, if not more, although the fact is not so readily got at. I say that it may be taken for granted, because it is well known that young children suffer more than adults from confinement in close rooms. It often happens, and especially in towns, that a particular school acquires an amount of popularity which attracts to it a crowd of children, filling up every available seat till there is literally no room left for real work. When a room is thus over-filled very little real teaching is done, and yet the managers, from a variety of causes, will not make up their minds to limit the number of admissions."

Now, as to the consequences of all this in the production of disease, Miss Nightingale, who began her career of devotion as a missionary in the schools of the poor, states in a letter to me on the subject:—

"I have unquestionably seen (in my schoolmistress days) bred, under my eyes and nose, scarlet fever in the higher class (even) of boys' schools. Every one has seen the same process as to measles in all rich and poor schools (National, Union, &c).

But parents, rich and poor, are so blinded by the idea that every body must have measles once in their life, and 'you had better 'have it young,' that they do not understand what they see."

I have the warranty of Professor Owen for stating that even in the best warmed and ventilated schools, five or six hours enforced stillness of little and growing children is a violation of the primary laws of physiology; but I had the testimony of Miss Florence Nightingale and others, as also of school inspectors, that even in the schools under inspection the children are placed under the conditions for impairing good bodily stamina, and for the generation of the epidemic disease by which so much infantile and juvenile slaughter is occasioned. In respect to middle class females in towns, I had the testimony of Mr. Robertson, the surgeon, of Manchester, and Dr. Drummond, of Glasgow, who are specially conversant with the diseases of females, and who are professionally eminent for the treatment of them, how extensively they are generated by defective bodily training, prolonged sedentary bodily constraint and insanitary treatment in schools, in reducing the proportions of young mothers who can suckle their own children, increasing the proportions of deaths from childbirth, producing ailing mothers and unhealthy children. In this view I confidently anticipate the support of the entire body of the medical profession in Europe and the United States of America.

In Sweden the evils have been met by the promotion of school gymnastics, called "health gymnastics," systematised specially for females by Ling, whose methods, together with swimming schools for females, from the remarkable effects produced, as shown in a medical paper sent to me by Professor Branting of Stockholm, are in such progress in the German States and in Russia that the number of competent trained teachers are insufficient to meet the demands for their services.* I am informed by Mr. Rahuson, a school commissioner at Amsterdam, that the physical evils attendant upon the present amount of sedentary confinement in schools required from young children was beginning to attract attention in Holland, and that they have under trial a system of exercises for schools advocated by Dr. Schrieber, of Leipsic. Now I find that the sanitary

* Professor Branting adduces testimony as to the experience in Sweden corroborative of that of the half-timers in this country, that it is found that children who were inapt at mental work, after having been exercised bodily at gymnastics, "instead of being lazy, dull, and opposed to reading, have become lively and disposed to receive instruction."

views of Dr. Schrieber are entirely in accordance with those I have collected from medical testimony. "The chief question," he says, "is, How are our children brought up? Is it according to the laws of nature? The answer is, No, or we should not see so many children who were rosy and healthy before going to school become pale and bloodless after school has begun;" and he prescribes the limitation of the hours of school confinement, and within those hours prescribed bodily exercises at short intervals. Mr. David Stow informs me that the sickness in the school of the training college at Glasgow "last winter was less than half of what it was in those of the locality in which children have not similar playgrounds and airy school rooms with physical exercise at short intervals." This is no more than I should have anticipated. Indeed in the district pauper schools, with children who are healthy at their entrance, the sickness and mortality has been reduced to nearly one third of that which is prevalent amongst children of the middle classes.

I brought the topic of the violation of the laws of psychology, and the evidence in relation to it, as also of the laws of physiology, before the section of the Association for the advancement of Science at its last meeting, where you presided, at Oxford; and you will bear me witness of the important concurrent testimony given by school teachers and others in accordance with the view I have stated. You may remember the testimony of experienced examiners as to what may be called a half college-time, or six hours' mental work instead of ten or twelve, for adults, was the time of the great majority of prize men; and that the "long-timers," men who read twelve or thirteen hours a day, invariably got plucked; whilst the foremost in mental were commonly amongst the foremost in boat-racing and physical exercise. You will have received the testimony of the Vice-chancellor that the institution of the systematised exercise of the Volunteer drill had been attended generally by an improvement of the mental labour, and the whole of the order and discipline, as well as the health of the University; encouraged by these results, he was considering of provision for cavalry exercises. There was a bequest, of which his Grace the Duke of Newcastle is the trustee, now amounting to 10,000*l.*, for maintaining a manège, or riding school, in connexion with the University; and I was happy to have his permission to state, that he would

gladly see it applied for the formation of a cavalry school. In the number of *Macmillan's Magazine* for this month you will find an interesting account, by the head of the Oxford gymnasium, of the systematised bodily training in connexion with the mental labour of the University, and how insufficient the ordinary recreative exercises are; and how necessary systematised gymnastics are even for our first-class youth, and what expansion is given to their chests, and bodily power, and how much even they are improved by them. I trust that we may have from the University an example of a revival of a really classical education, an education founded on the precepts of Plato, Aristotle, and Galen, which divided the public education into three parts, of which one was for mental training in the school, one bodily training in the gymnasium, and the third tuition in accomplishments, as music.

But to return to the pressing question as to the children of the more depressed populations of towns.

Acknowledging the need of systematised physical training, in connexion with mental culture, the statement of its necessity is everywhere met with the question: "But how is it to be got. Our small parish school has no room for play or exercising grounds; nor can we afford to pay for a drill master, or a swimming master, even if we had a swimming bath?"

To this my answer is, that the principle of administrative consolidation will give you the means of obtaining all this and more. You cannot get the means of physical training separately for a single school, but by union you may get the sufficient services of a drill serjeant for all at an inconsiderable expense. By combination you may gain the use of a ground for exercise, and also of a swimming bath in turns at a cheap rate. Union will give you, in addition to the means of an improved physical training, the means of teaching of the accuracy of the hand and eye by drawing, which is so needful in handicrafts, and instrumental as well as vocal music, which is proved, instead of contributing to the revelry of the beer shop, to add to the psalmody of the church and the cheerfulness of the home;—all this accomplishment may, by the principle of administrative consolidation, be comprehended within reduced rates of total expenditure for teaching power, such as that in the larger district schools; on which economical topic I refer you particularly to the details given in the evidence of

Mr. Mosely, the head master of the children's institution at Stepney.

The application of the principle of administrative consolidation, is further requisite for the most efficient application of the funds voted by Parliament for the promotion of popular education; much of which funds are now wasted in the production of inferior effects to those which are obtainable by an administration on sound practical principles. This appears to me to be a topic of primary importance, which may be conveniently reserved for subsequent development.

I might here ask a question to be submitted for consideration,—why, whilst the progress in the mechanical and physical sciences has been so great, the progress in social, legislative, and administrative science is so slow? why the pressure of physical and moral evil upon the lower class of the population is only regarded at the best for alleviation, and so little for prevention? why the practice of new principles in administration is viewed with so little interest? why, for instance, the example of the working of the principle of administrative consolidation, as it is most correctly executed in the Poor Law administration in Ireland, with more full relief, and an expenditure of only 1s. 6d. per head in the population and 1 per cent. of paupers, excites no inquiry or consideration for imitation in Scotland, where the expenditure is 4s. per head in the population, nor in England, where it is 6s., and the paupers are 4½ per cent. of the population? why the steady operation for years of the same administrative principle applied to education, by which a double result is obtained within the same period of time and a still greater gain in money, passes without inquiry or notice? why the results of the more correct trial of the half-time system of instruction, displayed now for some twenty years, under varied circumstances, should scarcely be noticed, except in the majority of instances only to be misapprehended and misrepresented? Yet these social and administrative results are equivalent to successful mechanical improvements by which the time and cost of production is reduced. It is true that amidst the varied forms of local administration we commonly find instances where minds of superior intelligence having been directed to the circumstances, they obtain glimpses or clear perceptions of correct principles, and promote applications of them. And this has been so in relation to the principle of administrative con-

solidation as applied to education. Thus at the Education Section of the Association for the Advancement of Social Science, held at Birmingham, it was opened for discussion in the following terms in a paper by the Rev. I. P. Hastings, the Rector of Anley Kings and Chaplain to the Bishop of Llandaff, who states :—

“ Take a given number of small parishes, the landlord some great man,—an absentee,—spending all his income abroad, or deeply encumbered ; or the land split up into infinitesimal holdings, and probably an impoverished benefice, vicarage, or curacy. How was a site to be obtained? How were schools to be instituted in parishes so situated, of which there are many in the rural districts, the population, probably, being also too small to contribute any sensible proportion of the annual expenses of the school by weekly payments? Now, to meet such cases as these, it seems to me that some force *ab extra* is needed to form such unions of small parishes, and afford grants towards the land needed and the necessary buildings. I have seen these plans voluntarily carried out, and answering extremely well, where two or three contiguous parishes contributed to one central school. But this was a case which could scarcely occur in any considerable proportion of the parishes needing education, from the unhappy differences which—it would be idle affectation to deny or gloss them over—exist among the clergy. If two contiguous benefices are held by men of earnest views, but who happen to be upon opposite parties, anything like cordial cooperation or junction in so vitally essential a matter as the parish schools is totally out of the question. It needs, therefore, some higher force to arrange educational unions, exactly as was done for the Poor Law unions ; and though it would be distasteful in many parishes, yet on the whole I think it would be productive of vast benefit.”

This view received concurrent support ; but I take the liberty of observing upon it, that in administrative re-organizations we have received the best aid and the least opposition from the local clergy whensoever decided measures for the secular as well as the religious and moral improvement of the wage classes are commended to them. Though such local differences as those adverted to may exist as commonly as represented, I have not found them in action in any degree so frequently as apprehended, as against authorized intervention. We find more frequently a jealousy or rather a well-founded distrust of any one who is of necessity inexperienced—taking the lead in a new organization, and a delicacy as well as a jealousy of any one of co-ordinate position doing so. For such reasons we find that gentlemen who will not yield any lead to each other, will often very cordially support a measure

conducted by a responsible public officer who is competently instructed and experienced in the subject matter of organization. I can state of my own experience that noblemen and influential owners of property will give a cordial reception and support to the impartial representations of the permanent heads of a public department, which would not be given to measures initiated by gentlemen or any unauthorized persons in their own neighbourhoods. With compulsory powers of local administrative organization under the Public Health Act, as well as under the Poor Law Amendment Act, instances of the really compulsory exercise of them against the inclinations of the body of the inhabitants, or those of leading position, have been extremely rare, and have commonly arisen out of some local party contest.

I solicit particular consideration of the following example of the practical working of the principle of administrative consolidation of educational means, as exhibiting elementary results extensively obtainable by legislative measures on principles recognized on the discussion of Mr. Hastings' paper. The example comprises an instance of the most legitimate application of a charitable endowment of funds left in general terms to be applied for the "good of a town" or of "a parish," or of the poor resident therein.

It may be recommended for the due appreciation of the full bearing of the example, that there should be a previous study of the principles of the educational division of labour, as carried out in the best district schools, and of the rationale of teaching on a large and a small scale, or of the teaching power gained by classification, as particularly developed in the evidence of Mr. Allen, the master of the school at Petersham, patronised by Lord John Russell, and of Mr. Thos. Crampton, the head master of the public schools at Brentford, corroborated by successful district school teachers, and expounded and confirmed by the testimony, from wide observation, of Mr. Tufnell. That evidence displays the power obtained by classification and the division of educational labour in a single large district school of pupils under one roof. The example which I am about to submit is, however, it should be borne in mind, an example of the rudimentary application of the same principles by the aggregation and classification of the infantile and juvenile population of a district or town, and the division of educational labour, it

may be, in separate buildings, or by the better adaptation of existing schoolhouses to classes and gradations of children.

The account of this example of the consolidation of the educational means of a town and district, and of its results, I collected at a meeting at Faversham, at which were present the Rev. Lewis W. Lewis, the curate of Faversham; Mr. R. G. Stone and Mr. G. Martin, trustees (Mr. Martin being a leading member of a Dissenting congregation); Mr. Bate, the chairman of the trust of the Faversham National and Commercial Schools; and Mr. G. Robinson, the Principal of the schools.

The population of the town of Faversham is between 5,000 and 6,000. In 1840, Mr. Henry Wreight, banker, of Faversham, bequeathed property amounting to 2,000*l.* per annum, to be applied at the discretion of certain trustees, to “the relief of any poor persons residing in the town who have not been in the habit of receiving relief from the parish, but who from distress, losses in trade, &c., may have become objects of charity;” or unto the relief of other sober and industrious persons in the said town who are poor, for encouraging and promoting them in their trade;” or “in increasing the weekly pay allowed by the parish to poor widows and orphan children, sick and aged poor persons, or *in any other way the said trustees shall think proper and conducive to charitable purposes in the said town.*”

Mr. Edward J. Hilton, the banker, and Mr. Stone and others of the trustees, agreed, even in the earlier operation of the first-recited provisions, that they were—as we could have most confidently predicted they would be—productive of the worst effects, at variance with the intention of the testator of benefiting the town, for they were pauperising many of the residents, and attracting an inferior non-resident and pauper class into the parish for the sake of participation in the doles. On this experience, and giving a wide remedial interpretation to the last-recited clause, of applying the bequests in any other way they should think proper, they agreed that the most efficient mode of attaining the founder’s general object, that of benefiting the great mass of the poorer population, was by doing that which would best promote productive industry, prevent poverty, and best ensure the permanent well-being of their children, by ensuring those children a sound religious and moral education. The trustees, therefore, determined upon applying the funds chiefly to popular educational purposes, as the most conducive to really “charitable purposes.”

But inasmuch as the bequest was left for the benefit of the poor in general, without distinction of sect, it appeared to the trustees to be just to open the schools or apply the funds for the education of children of Wesleyans or Baptists, or other sects, and to remove all barriers to their admission to the same schools. They therefore formed a scheme of public education adapted to the general population of the town. For the primary education, they constituted a good infant school; secondly, a National school; thirdly, a middle-class or commercial school; fourthly, an evening school, under trained masters, to enable adults as well as others to supply early educational defects.

The third or commercial school gives instruction "in the Holy Scriptures, in general English literature, geography, navigation, land surveying, book-keeping, agricultural science, French, and such other languages and branches of useful knowledge as to the trustees shall from time to time seem fit, so as to afford an opportunity of acquiring a sound religious, moral, and useful education." These views were carried into effect by a scheme of the Court of Chancery, ordered the 5th of April 1856 in a cause, the Attorney-General *v.* Hilton.

An old foundation grammar school, under another trust, is in a position at present by voluntary adaptation to supply a high school, and complete the gradation of public education for the town and district.

The admission to the middle-class or the commercial school is under a provision that the trustees shall be at liberty to promote any boy after he shall have attained the age of twelve years, from the national school to the commercial school, as "a reward for scholarship and an encouragement to diligence and good conduct;" and also to provide him with books and pay his capitation fees.

This reward, the Principal explained, is adjudicated upon what is in fact a competitive examination for prize scholarships, and is found to work exceedingly well.

A further provision of the union scheme, in which the competitive examination principle is practically introduced, is found to work equally well upon the commercial school, namely, that there shall be an annual examination of the boys by one or more examiners, "graduates of one of the English universities, to be invited by the trustees;" that besides giving prize premiums, if after such examination "the examiners and head master shall represent to the trustees that certain of the scholars have particularly distinguished themselves," the trustees may give

“ exhibitions as premiums or otherwise, in aiding the pro-
“ motion to the free grammar school of the said town of
“ Faversham of such scholars as shall have distinguished
“ themselves by their aptitude for learning, diligence, or
“ good conduct, and who in the judgment of the examiners
“ and head master shall be deserving of the same.”

The head master of the grammar school, who is appointed by the university, is favourably disposed towards the prize pupils, or those distinguished by competitive examinations from the commercial schools; but the scheme of public education for the town would have been more complete if the grammar school had been authoritatively brought under one local management, supervised, as all agreed to be of great advantage, and indeed absolutely essential to the most efficient management, by the Inspectors of the Privy Council. As it is, the gradation, from the infant school to the National school, and thence by competitive examination to the commercial school, and further to the high or grammar school, with the contribution of the highest prize scholars determined by competitive examinations to professions or to the university, is deemed complete.* “The religious difficulty” is obviated by the

* As showing the stationary character of much of the prevalent educational views and feelings, it is curious to note, that we often now find the like feeling to that which prevailed formerly on the subject of the (possible) admission of children of the labouring classes even into the grammar schools originally intended for them. Mr. Henry Cole, when Sub-commissioner of Records, found amongst them a scheme of bishoprics, which included a scheme for the extension of popular education on the suppression of the monasteries by Henry the VIIIth., in the king's own handwriting. History relates how the money intended by Thos. Cromwell and Wolsey, and at one time by the king, to the advancement of popular education, was misapplied. The schools to be founded under this scheme were intended for the lower ranks of society. The child whose father was known to possess 300*l.* in goods, or to spend 40*l.* per annum, was to be excluded. The admission of the ploughman and poor man's son was advocated by Archbishop Cranmer. A discussion on the very point is described to have taken place at Canterbury.

“ This year the cathedral church of Canterbury was altered from monks to secular men of the clergy, viz., prebendaries or canons, petty canons, choristers, and scholars. At this erection were present Thomas Cranmer, archbishop; the Lord Rich, chancellor of the Court of Augmentation of the Revenues of the Crown; Sir Christopher Hales, knight, the king's attorney; Sir Anthony Saint Leger, knight, with divers other commissioners, and nominating and electing such convenient and fit persons as should serve for the furniture of the said cathedral church according to the new foundation, it came to pass that when they should elect the children of the grammar school, there were of the Commissioners more than one or two who would have admitted

following provision in relation to admissions to the national and commercial schools:—

but sons or younger brethren of gentlemen. As for other, husbandmen's children, they were more meet, they said, for the plough, and to be artificers, than to occupy the place of the learned sort; so that they wished none else to be put to school, but only gentlemen's children. Whereunto the most reverend father the archbishop, being of a contrary mind, said, 'That he thought it not indifferent so to order the matter;' for, said he, 'poor men's children are many times endued with more singular gifts of nature, which are also the gifts of God, as, with eloquence, memory, apt pronounciation, sobriety, and such like; and also commonly more apt to apply their study, than is the gentleman's son, delicately educated.' Hereunto it was on the other part replied, 'that it was meet for the ploughman's son to go to plough, and the artificer's son to apply the trade of his parent's vocation; and the gentleman's children are meet to have the knowledge of government and rule in the commonwealth. For we have,' said they, 'as much need of ploughmen as any other state; and all sorts of men may not go to school.' 'I grant,' replied the archbishop, 'much of your meaning herein as needful in a commonwealth; but yet utterly to exclude the ploughman's son and the poor man's son from the benefits of learning, as though they were unworthy to have the gifts of the Holy Ghost bestowed upon them as well as upon others, is as much as to say, that Almighty God should not be at liberty to bestow his great gifts of grace upon any person, nor nowhere else but as we and other men shall appoint them to be employed, according to our fancy, and not according to His most godly will and pleasure, who giveth His gifts both of learning and other perfections in all sciences unto all kinds and states of people indifferently. Even so doth he many times withdraw from them and their posterity again those beneficial gifts, if they be not thankful. If we should shut up into a strait corner the bountiful grace of the Holy Ghost, and thereupon attempt to build our fancies, we should make as perfect a work thereof as those that took upon them to build the Tower of Babel; for God would so provide that the offspring of our best-born children should peradventure become most unapt to learn and very dolts, as I myself have seen no small number of them very dull, and without all manner of capacity. And, to say the truth, I take it that none of us all here, being gentlemen born (as I think), but had our beginning that way from a low and base parentage; and through the benefit of learning, and other civil knowledge, for the most part all gentlemen ascend to their estate.' Then it was again answered, 'That the most part of the nobility came up by feats of arms and martial acts.' 'As though,' said the archbishop, 'that the noble captain was always unfurnished of good learning and knowledge to persuade and dissuade his army rhetorically, who rather that way is brought into authority than else his manly looks. To conclude: the poor man's son by painstaking will for the most part be learned, when the gentleman's son will not take the pains to get it. And we are taught by the Scriptures that Almighty God raiseth up from the dunghill, and setteth him in high authority. And whenever it pleaseth Him of His Divine Providence, He disposeth princes unto a right humble and poor estate. Wherefore, if the gentleman's son be apt to learning let him be admitted; if not apt, let the poor man's child that is apt enter his room'—with words to the like effect, such a seasonable patron of poor men was the archbishop."

“The school shall be open to children of parents of all religious tenets; and no boy shall be required to learn the catechism of the Church of England in case his parents or next friends shall express in writing to the trustees their objections on conscientious grounds to his doing so.”

Dissenters are represented amongst the trustees, the chairman of whom is a Dissenter, and there is one Dissenter on the school committee, of which Lord Sondes is president; the mayor of Faversham, the rural dean, the vicar of Faversham, and the chairman of the trustees, are vice-presidents. The school committee comprise the curate of Faversham the vicar and curate of Preston, and the vicar of Offspring, and such other of the clergy of parishes in the neighbourhood of Faversham whence children are sent to the union schools. There are also seven laymen appointed at a general meeting on the committee.

Children from nine parishes adjacent to Faversham are sent to the union school. Out of 751 children at present in the school, 511 belong to Faversham proper, the rest to the out parishes. Since the commencement of the new district schools, the total number of children admitted up to February 1860 was 3,616, of whom 678 were to the evening schools. The reports of the Privy Council Inspectors assign a first-class character to the tuition.

Questions put to Mr. Robinson, the Principal:—

“What is the proportion of Dissenters’ children in the school?—Forty-three per cent. The positive number is 333 out of 761 in the National school.

“How many of the parents of these children of Dissenters have sent in the allowed certificates of objection to their children being taught the Church catechism?—About a dozen.

“Is that the number now exempted from the teaching of the Church catechism?—Yes; but they are exclusively children attending the high or commercial school. I am unaware of one subsisting case or objection to the teaching of the catechism to Dissenters’ children attending the National school.

“What is the proportion of Dissenters to the population?—About one fifth of the population, as nearly as may be estimated.

“Of what denominations are the Dissenters?—Wesleyans, Independents, Baptists, chiefly.

“Are there no Roman Catholics in the town?—Not any.

“What may be stated as the gain to the town by the scheme of administration and union of educational means which gives education on a large scale, as compared with the education on a small scale,—in separate private schools?—The cost in the separate private schools was usually about 10s. a quarter, or two pounds

per annum. The present expense in the National school is under one pound, or 19s., of which the parents pay only three or four shillings. But a much more complete education is given, with the aid and supervision of the Committee of Privy Council, in one half the time that was or is given in the private schools.

Within what time, supposing a class of children taken from the infant school, say at seven years of age, do you get them to read well or with a perception of the sense of the matter read, to write a fair hand, to spell well, and through arithmetic, say to decimal fractions?—In between three or four years, or under the eleventh year.

“ In what time are children conducted to the same points in the private schools?—Within and between six and seven years, or concluding at the thirteenth or fourteenth year of age.

“ So that by the improved administration you now do comparatively well at an expense of between three and four pounds what is usually done comparatively ill by the ordinary private schools for 12 or 14 pounds?—Yes. I believe from experience that to be the relative gain.

“ How is it with the commercial school expense as compared with the ordinary private schools?—In the commercial school, in consequence of the augmentation of the teaching power, we give a thoroughly sound and useful education for one-fourth the sum for which it can be obtained in private schools professing to teach the same subjects.

“ At what ages do children in this district obtain profitable employment?—At about 11 for constant employment.

“ That being the age at which you, by improved tuition, get them through the primary elements of education, what is the effect upon the further education of the children?—The parents begin to say, when the children have got through the elementary instruction, ‘ They may go to work now, and what more they want ‘ they may get at the evening school.’ Our institution does afford them the means of continuing the education in an evening school, which is conducted by practised and efficient teachers.

“ Is the evening school well attended?—I consider that it is. In the winter months we have as many as 100 boys and men between the ages of 12 and 20.

“ Of those who have gone through your course of primary instruction, for what chiefly do they return to the evening schools?—For various objects. Some to keep up or to advance in the subjects they have already acquired at school. Others to acquire a knowledge of drawing or navigation. The evening school, as taught by efficient teachers, is highly popular.

“ What does your experience enable you to pronounce as to the comparative effect of entire school attendance and exclusion from employment up to the thirteenth or fourteenth year, and liberating from school and employment after the eleventh year, with a power of continuance by the evening schools?—I believe

that children, by being thus early disciplined mentally, and accustomed to employment, eventually become, morally as well as industrially, better than those who are taught languidly, and enter employment later.

“ It appears that there are 240 children who come from the suburban districts, out of Faversham proper. Now, what would be the effect upon the education of the children of Faversham proper if these 240 children were excluded from the school?—The classes must be reduced, and all weakened. The advantages derived from classification and subdivision would, to the extent of the reduction, be destroyed, and the teaching power reduced, and the time occupied by school instruction extended, and the expense to Faversham proper considerably increased. The teaching power would be less efficient, for we could not get so good a staff unless at greatly augmented expense.

“ The union then comprising the outlying parishes is strictly a gain to the people of Faversham proper?—Yes, a gain in every respect, economically as well as morally and intellectually, for their children.

The proportion of Dissenters was about one-third, and their secession would, it appeared, involve a similar loss to that stated in relation to the supposed outside parishes; whilst the expense of time and money to the seceders would be at least doubled.

“ What was the effect of the improved educational organization of the public schools upon the private schools in the town?—Two private middle-class schools fell off as soon as the National school was got into operation, and this so increased the numbers in the public school that an additional room was built to accommodate the better class of children. The progress of the voluntary recognition of the improved tuition is shown in this extract from the Report of 1856:—

“ Commercial Departments.

“ During many months your committee received various applications from the parents of children in a higher social position than those in the National school, complaining of the want in this town of schools in which a good commercial education could be produced. At that time two private schools had been recently closed, and many persons were left to the alternative of seeking for their children admission to the National schools, or of procuring for them an education at the grammar school. Under these circumstances the committee, since May last, have permitted pupils of this class to attend the boys' school on payment of sixpence per week, and the cost of books and stationery. These boys are taught in classes with the National scholars, and receive about two hours per day additional instruction. The committee are mainly indebted for the success of this combination to the judicious arrangements of the Principal, who has thus suc-

ceeded in developing the plan of education recommended by the Dean of Hereford, and so successfully carried on under his auspices, at King's Somborne. The committee consider that many additional advantages would be derived from the erection of another school-room to satisfy the requirements of a large and increasing population. Great benefit would also accrue by such arrangements as would not only afford a more extended education to the scholars of the commercial department, but enable the committee, by means of exhibitions, to extend similar advantages to boys in the National school who may give evidence of good conduct and superior aptitude for learning. Before the new scheme was adopted there were in the year 1850 nearly 300 children in the old schools. There are now in the new schools nearly 800."

"What proportion of children of the ages who ought to be at school, and who belong to the district comprised in it, attend the district schools?—Assuming that one-seventh of the whole population ought to be at school, the proportion of those who attend the Faversham district schools is 52·27 per cent. I should state, however, that the number of parishes included in the district is 11, two of which have parochial schools of their own; there is also a British girls' school in the town of Faversham. The proportion of those who attend from the town itself is 77·42."

"In the yet subsisting private schools, is there, so far as you are aware, any approach to the teaching power of the district schools?—Not for the middle or lower classes, with the exception of the British girls' school, which is conducted by a certificated mistress and an efficient staff of pupil-teachers. There are also two other certificated teachers in schools of parishes from which we get children, but they are not entitled to the Government aid of pupil or assistant teachers, on account of the smallness of their average number in attendance.

"Why, being free to join the district schools, or to send their children there, do the parents decline to do so?—In the out-parishes many parents send their children to the village school simply from its proximity to their residence. I do not believe that they are induced to do so by any local influence, except, perhaps, in one or two parishes. In the town of Faversham there are very few families, whose social position admits of their doing so, that do not avail themselves of the district schools for *some* of their children. A few prefer private schools for young children, under a mistaken notion that they will be better prepared there for the district schools. The British school educates girls only, and being a first-class school, has always been well attended; but I am informed by highly respected and conscientious Dissenters, that it is not at all probable that a single child is sent there from religious scruples. Some few, but I am glad to say the number is very small, are kept away from imaginary grievances; entire satisfaction to every person not being always the result of the most careful management.

"Of those children within the district, who might be in the

district school, but who are not in any school, what, so far as you know, are the more common reasons of their absence?—Acting upon your suggestion, I have ascertained, through the police, that there are about a dozen families, the children of whom have never attended any school; they attribute the absence of the children to the reckless habits and the depraved character of the parents, together with their utter indifference to their children's welfare. There are some also who have left at an early age, in the middle of their school course, for some temporary employment, intending to return to school at a future period. These irregulars (numerous in all schools) find it difficult to reach the higher classes, and seldom leave with that amount of knowledge which the primary schools should afford.

“What is the extreme distance from which children are sent from out-parishes?—Between four and five miles.

“Were the children sent from the out-parishes chiefly at the instance of the clergy or laity?—In three or four parishes, perhaps, chiefly at the instance of the clergy, but as a general rule, I should say from the parents' free choice. I have found by experience that the latter have an intuitive perception of the amount of real benefit which their children derive from any particular school; and while nothing short of actual bribes will induce them to send their children to a bad school, their parental love will lead them to make great sacrifices in order to obtain a good education for them.

“Was there any difficulty in respect to existing educational provisions in the out-parishes?—No, on the contrary; the clergy are *ex officio* members of the committee, and have regularly attended the meetings. The present chairman, the rural dean, although the chief supporter of a school in his own parish, has for a long time most cordially devoted his talents and influence to the improvement and benefit of the institution.

“Are there any conveniences experienced on the part of families in getting their children to the same establishment, as infants going to the infant school, those a stage older going to the National school, and the eldest to the commercial school?—Yes; the elder children taking charge of the younger in going and returning from school must be a great convenience to the parents, and relieve them from much trouble and anxiety. In many cases, if the younger children could not attend the same school, the older would be kept at home to take care of them.

“Are there not in the district school wider differences in the social position of the pupils than was common under the old system?—Yes.

“How are those differences conciliated, or what has been the effect experienced in the new district school?—Shortly after the district schools were opened, two day schools in the town for boys of the middle class rapidly fell off in consequence of many of the parents sending their children to the district school, sacrificing as it were social position for what they considered a real gain to their children. These private schools were subsequently given up,

when the parents had no alternative but to avail themselves of the district schools. They were, however, encouraged to pay sixpence per week instead of a penny, for which charge two extra hours, before and after school, were devoted to their children alone. On this principle everything worked and harmonised well; but the school became so over-crowded, that the committee found it necessary to apply to the Trustees of Public Charities for additional buildings. Hence originated the commercial school, which is contiguous, and in which the poorer boys promoted from the National school are mixed indiscriminately with the children of professional persons, shopkeepers, &c. The girls' school consists chiefly of children of the lower classes.

“Supposing a child to commence at the infant school, and afterwards to go into the National school, how many years will it take to complete its education, so as to read well, write a fair hand, and work arithmetic to decimal fractions; and what will have been the total expense of the educational power? What would have been the time and expense of obtaining the like amount of instruction in small and separate schools on the old system?—A child entering the infant school at five years of age would complete such an education in seven years. The expense of the teaching power, according to the present average cost per child, including books and stationery, would be 6*l.* 13*s.*, of which sum the parents would pay about 1*l.* 3*s.* In small and separate schools on the old system the time would, I should think, be increased by three years, and the cost per child, not including books and stationery, as nearly as I can ascertain, about 2*l.*

“In what time, on the average, will a pupil be fairly got through the course of instruction given in the second class or commercial school, and at what expense?—A pupil with average ability will complete the course of instruction in the commercial school in six years, at a total expense, including all books, &c., of 19*l.*

“In what time, on the average, and at what expense, might a shopkeeper or middle-class person obtain for his son the like description and amount of instruction at private or separate schools on the old system?—I believe in eight years, at about an expense for school fees of 6*l.* 6*s.* per annum, and 1*l.* for books, stationery, and extras.

“If the grammar school were put on the like footing as a high school, in what time and at what expense might the additional course of instruction there given be completed?—I should say, in two or three years, at an expense of 30*l.*

The next point, as it appeared to me, was to ascertain the actual results of the improved education gained, to the lowest as well as the other classes of the children of the town, by the principle of administrative consolidation, or of aggregation, for the purpose of classification, so far as it had been carried in this instance. The relieving officer of the Poor Law Union, who had been 27 years in office, three of which were under

the old, and 24 were under the new Poor Law, states, that five to one get into early and regular employment now as compared with those who were formerly unemployed, and that "applications for relief are not one-third what they used to be." Many get into occupations from which they were formerly shut out from their want of education. They retain their places better than they used to do. As to the better educated girls, fewer now forfeit their places for misconduct. In answer to the questions directed to the head schoolmistress, Miss Gibson, she accounted for every one of the class of pupils who had left the school in one year, 1855, and showed that they were in good occupation, and had every reason to believe that the whole were conducting themselves properly, and would when old enough prove first-class servants.

Being desirous of the direct testimony of employers, I asked for the name of the most extensive employer of children who had been educated under the new system. A manager connected with the largest manufacturing firm in the neighbourhood was requested to attend, when he gave the following testimony:—

Mr. J. M. Cowper, Superintendent of Messrs. Hall and Sons, Powder Manufactory, Faversham.

"How many of the children who have been educated under the new system in these union schools have been engaged by the Messrs. Hall, and been under your superintendence so as to enable you to speak of their value for labour?—About 200.

"What is your experience of their aptitudes and value for labour, as compared with children who are uneducated, or educated on old methods?—I find that they are more intelligent, more easily understand what is required of them, and do it in a superior manner. They do not require so much labour of superintendence as uneducated or worse educated children. They are more trustworthy at their work than duller persons, and require less superintendence. I am speaking generally. Occasionally you meet with an uneducated person who is nevertheless very intelligent, but that is not the character of the class.

"At what age do you take the children?—At between 11 and 12 years of age."

The trustees expressed their confidence that the girls educated under the new system would be found to be more intelligent, more attentive, and better servants than under the old system.

In regard to the collective effects, the trustees expressed their confident belief that the educational improvement would very early produce an entire change in the moral

and social condition of the place. Indeed, they declared this beneficial influence was already clearly perceptible to those who knew what that condition was formerly.

On reviewing the intellectual results of this consolidation, I am enabled to express a confident opinion that those results would be greatly augmented by the application of the half-time system, (with which the officers of the school appeared to be unacquainted,) and that the mental as well as bodily aptitudes for productive service would be further increased by systematic physical training, although the average of the children appeared to possess the health of a rural rather than that of an average urban population.

The combination of the physical with the mental training, besides removing predispositions to disease from congenital taints and weaknesses (the evils of which only a competent officer of health will duly appreciate), would, I have no doubt, have a decidedly important effect in bringing in seceders, and thus augmenting the strength of the voluntary combination and increase the classification and the efficiency of the educational means, and reduce even the present expenditure of time as well as of money. If the naval and military drill, with systematised gymnastics for the girls, together with a swimming school, were added to the present intellectual course,—which already includes vocal music,—the effects would be so striking in the health, the whole bearing and manners of the children,—the drill and the bodily exercises would, moreover, be so popular with the whole of the children, that they would repine at exclusion from them, and be ill at ease in small separate schools, in obscure buildings, where the like exercises could rarely be given, except on a miserably inferior scale, but generally could not be given at all. The evil effects of schism on education would be more strikingly manifest to parents, and would make them extremely reluctant to forego the benefits of combination; whilst the more complete the combination, the greater would be the power of classification for the preservation of social as well as intellectual classification, for the satisfaction of parents as well as for the improvement of the children.

I reserve some observations on improvements in the machinery of the district school.

I also reserve an account of an educational union of five rural parishes at Sheldwick Lees, a few miles from Faversham, an union with the like effect proportioned to

its extent of obtaining increased efficiency without increased expense.

I submit the foregoing example as in principle complete in itself for the attainment of the ends of your Commission, as the measures required for "the extension of sound and cheap elementary instruction to all classes of the people." The consequence of separate elementary instruction on the small scale is, I apprehend, inevitable; either sad inferiority of quality, or enormously augmented and oppressive expense, or both.

I submit the following testimony, showing the varied consideration of the same principles under different aspects, and the gain derivable from their application, and the avoidance of the waste of educational means under different conditions. Mr. Thomas Crampton, the head master of the public school at Brentford, was asked,—

"Do you know of any instance of a needless expenditure of money in school building for separate parishes?—Many. Within a mile of Brentford, for example, there are some expensive and elaborately finished school buildings for boys, girls, and infants, together with teachers' residences, connected with the district church of St. John's, Woodlands. Within a quarter of a mile there are similar school buildings connected with the church at Spring Grove. The number of genteel residences and superior villas accounts for the increase of church accommodation; but one fails to see the necessity for duplicate groups of school buildings within a stone's throw of each other for the education of the children living in a few scattered cottages, there being also ample school accommodation in the adjoining places of Brentford, Hounslow, and Isleworth. I could supply other instances at Bristol, at Sheerness, at Staines, and at Ealing.

"Looking at the educational means in your own immediate vicinity of Brentford, can you state what, in your view, would be the advantage derived from combining them similarly to the combination at Faversham?—I believe by such a combination the *quality* of the instruction would be more than doubly improved from the reasons which I have already given. The saving of *time* would vary from two to threefold, according to the less or more extensive combination, or, putting the same result in another form, I believe the instruction may be *augmented in amount* in the proportions I have just stated; that is, in a school of 300 we may teach in one year as much as we may in a school of 100 in three. Of course allowance must be made for the increase of mental power in the advanced age of the pupil, which would practically lessen the above period of three years, but *cæteris paribus* the above proportion would hold good. The *reducing the rate of expense per head* will be manifest by the following calculation. In a school of 400 I should put the head master's salary at 200*l.* per annum,

or 10s. per pupil. The average pay of a pupil-teacher at 15*l.* per annum will involve a charge of 6*s.* 8*d.* per head for a class of 45. On the other hand, in a school of 50 boys I put the master's salary at 100*l.*, believing that very few teachers worthy the name can be obtained for less; one pupil-teacher at 15*l.* for 30 children; together involving an expenditure 2*l.* 10*s.* per head as compared with 16*s.* 8*d.* in the school of 400 pupils. I omit the cost of books on both sides, and also the proportion per head for building expenses, which will be much greater in the small than the large school. I consider, therefore, that large schools may be maintained at three times the efficiency and one-third the cost of small ones. The greater efficiency of large schools induces the attendance of a much greater proportion of scholars in towns than in villages, notwithstanding the more effective efforts of the clergy and others in inducing school attendance in villages than in towns. In many villages, as, for instance, Minster, in Kent, the school attendance is not more than five per cent. of the population. In towns having large good schools, as at Faversham, the school attendance is often 15 per cent. I believe that increased school attendance would be better effected by having large and consequently efficient schools in contradistinction to small ones than by any other means.

“What effects, so far as you have observed, are obtainable by bringing classes of scholars of different social position under the same roof?—Most beneficial ones. The superior manners and *tone* of conduct common to children whose parents are in easy circumstances raises by imitation and example those inferior to them in these respects. Good communications here improve imperfect manners, while there are few, if any, opportunities for the operation of objectionable influences that might be supposed to emanate from the poorest. A well-dressed boy is disposed to value more highly his good clothing by seeing a poorly clad schoolfellow, upon whom also the examples of neatness and carefulness of the richer boys act most beneficially. Feelings of mutual respect between various classes are also developed. A *respectable* boy also sees that his advance depends on his work, in which he is so frequently beaten by his indigent friend as to cease priding himself on advantages of social position. The vestiges of *caste*, which tend to induce pride and idleness on part of the rich, and lead to servility and want of self-respect on part of the poor, are practically obliterated in our good public schools, where “the rich and poor meet together.” The advantage to the school funds from the richer boys is also very considerable. In my own school *all pay what they please*. Those who cannot pay anything have their schooling paid for them when their necessities have been simply investigated. The majority pay 3*d.* weekly; many pay 10*s.* per quarter, and several make higher payments, besides subscribing liberally to the school funds. We have no trouble in getting money from parents; and since we opened the doors to the children of shopkeepers and tradesmen, our school fees have trebled in amount. Let me remark, that the small tradesmen is often more in need of and benefited by the education offered in

our good National or British schools than his poorer neighbours. The latter can have their children well taught for a few pence per week, but the former would have to pay at the rate of 3s. per week to obtain as good an education for each of his children, irrespective of board.

“ In the neighbourhood of Brentford have you a population having children of the class which may be described as of the *ragged school* class?—Yes; a large portion of the people of Brentford are very poor, many are professional *cadgers*; and one of the strongest pleas urged by Her Majesty’s inspector, on behalf of our new schools, was, that they largely aid the education of ‘the poorest population of a very poor place.’

“ What would be the comparative facility of dealing with children of that class under a combination of educational means, as by a district school union, as compared with a separate voluntary subscription and a separate ragged school?—I believe that very superior advantages would accrue to ‘ragged’ scholars from being sent to mix with and be taught along with better class children than by being collected in ‘ragged schools.’ The coarse habits, untidiness, and want of cleanliness on the part of the poor ‘ragged’ boys is doubtless an obstacle to their partaking, at present, as much as they might do, of the educational advantages of our British and National schools; but by a separate classroom or two, used as introductory rooms, in which this pariah class might be kept till made clean, neat, and orderly enough to be drafted off into the main school, these objections would be obviated. I regard the establishment of separate ‘ragged’ schools as much inferior to well-directed efforts for bringing the ‘ragged’ children into good public schools. These so-called ‘ragged’ schools will soon work upward—must indeed do so if they are successful—into National or British schools, which latter were indeed formerly mostly filled with this class of scholars. Much greater scope is, I believe, open to effective visiting and personal effort in individuals of the ‘ragged’ class, than by the establishing of separate schools for them.

“ Might not the services of the police and of the relieving officers be usefully brought in aid of the district school teacher in dealing with the ragged-school class?—Yes, most effectively. At present, nearly all this work falls upon the clergy and other ministers of religion, aided often by zealous philanthropic ‘district visitors;’ but the relieving officer is nearly always, and the policeman in many cases, intelligent enough for most useful efforts in this way. Our relieving officer regularly makes the educational inquiry a part of his duty; and this is often brought to my notice by the sudden influx of some dozen or more poor children, who, probably, but for his advice, would keep away from school altogether. Inquiry and advice might at least be rendered; and, if not connected with the recommendation of any particular school to the disparagement of another, would, I think, be kindly received. To make the policeman thus the agent of education would by no means lessen his usefulness in other respects.

“What is the effect of the demands for domestic service and profitable employment upon the school attendance in such a district as yours?—The demand for domestic service thins the upper classes of our girls’ school, so as to leave few female pupils above 13 years of age. Girls of that age can always get employment as nurse maids, or in other domestic employments. In regard to the boys of this age very many earn from three to six or seven shillings a week as errand and shop boys. This welcome addition to the father’s 15 to 20 shillings is too important to be sacrificed for educational advantages, unless under circumstances of excellent family management, and where also the educational advantages are unquestionable. Many a family I know who have made noble struggles to keep their son at a good school for “another year.”

“Would not the half-time system be useful in conciliating school attendance with such demands for industrial and domestic service?—I believe it would in many cases, such as, for instance, where boys are employed in cleaning knives and shoes, and which they might get done so as to attend half a day at school. In many cases a little management on the part of employers would allow of half-time arrangements being systematically made. I am, however, no advocate of half-time applied to school hours, except in cases of necessity. The *change of occupation* from the close thinking in *arithmetic* to the almost mechanical operation of *writing*, and from this to the very different process of *reading*, will, I believe, allow the majority of boys profitable employment, without exhaustion, for at least two half-days of three hours each, five times a week, which is at present the maximum of school work. The teacher who cannot go through this moderate amount of work is either not sufficiently qualified by healthy exercise, or is simply lazy.* The house to house visitations, to which I have alluded, would be most efficacious in bringing about half-time or other convenient arrangements for school attendance. Even the occasional, though irregular, visitation *does* increase this attendance, which would, I believe, be permanently increased very much if the system of visiting were made permanent and regular.

“In teaching on a large scale, what is the gain in time by improved methods of teaching which are not applicable or applicable to the same extent, to teaching on a small scale?—By the larger classes and more complete classification of large schools as compared with small, there is at least the gain of the numbers in all kinds of collective teaching. An ordinary collective lesson can be given as well to 50 boys as to 10. In regard to arithmetic, which is the subject involving most necessity for individual testing of results,

* Out of respect to the school powers that be, I have not examined the pupils on the short-time principle, but Mr. Crampton having proposed an appeal to an advanced class of them, I met it, and it was carried by a show of hands of the majority against him, that although he was not tired of giving lessons during the long hours, they were tired of receiving them.

an ordinary teacher can, by the improved methods applicable to large classes composed of pupils of the *same attainments*, easily and pleasantly keep a class of 50 boys at work, each doing separate sums, and altogether free from the temptation of copying, as you yourself witnessed in the Brentford school; whereas a teacher having to superintend no more than 20 boys of *different attainments* would have to fag very hard indeed to test the respective individual work of half this number. The gain on part of the former is indeed almost incredible, as well as there being scarcely any pressure on the teacher's powers to prevent the disorder, inattention, and trifling almost inseparable from the imperfect methods common to classes of pupils of multifarious attainments. It is, indeed, this irritation and anxiety to repress worrying disorder, that constitutes the difficulty and hardship of the teacher's work. It is this, and not the well-organized *teaching*, that produces the mental pressure from which many schoolmasters suffer. Divest the teaching in our schools of this brain-wearing annoyance, and you will make it no longer irksome, but pleasant.

Though the school inspectors have been discouraged from treating in their reports of matters requiring organic changes, yet I believe most of them perceive the evils which arise from having all the public schools of a district on one dead level, and some of them have not been able to avoid representing the necessity of a change and treating of it. The Rev. Mr. W. J. Kennedy, in his report as inspector on the schools in Lancashire and the Isle of Man, complains that our present system breaks down by preventing our having three or four series of graduated schools, and chaining the schools down to a uniform dead level.

"There is not," he says, "sufficient scope, there is not a sufficiently high style of school for boys ranging from nine and 10 to 13 and 14 years of age. We want at least three grades of schools, an infant or first school, a second school, and a third school. On a good, well-ordered National system the children would have to attend in the first school till they could read easy narratives, and write and cypher a little; that would be till about six or seven years of age. They would then have to attend the second school till they could read and write well, and till they were perfectly conversant with the compound rules in arithmetic, or even till they had gone through vulgar fractions, and till they could write from dictation, and parse an English sentence fairly, besides receiving the usual religious instruction. They would gain these acquirements by the time they were about nine or ten years of age, according to capacity. They should then be expected to attend the third school. Here I should be inclined to propose a great innovation. I would have regular lessons in four subjects only. In the morning, the boys should learn a language and drawing; in the afternoon arithmetic or mathematics, and music by notes. I would have no lessons on other subjects; but there

should be occasional lectures on various subjects, such as geography, history, anatomy, and physiology, and political economy; and periodical examinations for prizes might embrace some of these subjects."

"It will be argued against my suggestion that it is not practical, in three respects,—that we have not enough school-rooms nor masters for such a plan, and that our masters are not instructed in any other language than their own. I admit that my plan is chiefly suited for towns. But in towns we should not require many more school-rooms, if the ecclesiastical districts would combine and act together, one employing its room for the second school only, and another only for the third or highest description of school. In the same way, more masters would not be requisite. And, if the study of a language in the highest school were ever resolved on, a class of masters acquainted with it would soon spring up. I think there is no adequate substitute in intellectual training for the grammatical study of a language."

I have dwelt upon the case of the Faversham district school union, as displaying the operation of an administrative principle which will be found essential for the efficient application of all educational means, and as further presenting common elements which cannot be overlooked without injury, viz., the gradation of schools to meet the wants of the higher as well as of the lower of the middle classes of society, and to avoid the evils of the present dead level, which are eventually detrimental to the lowest classes. The gradation obtained by combination is, in reality, of five stages,—

- 1st. The infant school or class.
- 2d. The elementary juvenile or National school class.
- 3d. The supplement of the evening school, for youth and adults of the working classes.
- 4th. The middle class or commercial school.
- 5th. The high grammar or collegiate school.

All but one are worked harmoniously by a staff of school teachers under the active superintendence of a principal. The example in its chief features (including the improved administration of charitable trusts) will be found applicable to all parts of the country.

Though the principle of administrative combination of the educational means of districts would confer advantages on urban populations proportioned to their superior means of classification, it is, I apprehend, the only one (with the half-time principle, either on the alternate day plan, as exemplified in the valuable evidence which I have obtained from Mr. Charles Paget, the member for Nottingham, of the successful working of that principle in a rural district,

or on the half-day plan, and by circulating school teachers, some of whom might be put on horseback,) on which improvement could be extended with the requisite economy to thinly populated rural districts, such as are described in the following extract from a report on North and South Wales, with Monmouthshire, in 1853, by the Rev. H. Longueville Jones, one of Her Majesty's school inspectors.

“There are many large parishes in the middle of Wales, among the mountains, extending, some of them, eight, nine, or 10 miles over rocky desolate hills, intersected by a few valleys, wherein the population, which would not be numerous even if collected altogether, is broken up into little agglomerations of three, four, or five inhabitations. From one of these lots of houses to another may be three, or four, or five miles of rough boggy road, and in each lot some eight or 10 children on the average may be found ready and fit for instruction. For example, from Trawsfynydd to Bala in Merionethshire, a distance of more than 12 miles, no village, nothing more than a succession of groups of a few houses together, at wide intervals, is to be seen; so also between Dolgellau and the head of Llyn Tegid at Bala; so also between Goginan and Llangurig, on the road from Aberystwyth to Rhayadr; so also between Newtown and Bugaildy; all round the Precelly range of hills in Pembrokeshire, and especially between Merthyr Tydfil and Brecon, or between Brecon and the wild moors of the Mynydd Epynt hills. In districts such as these, supposing that money could be found for the erection and support of schools, children could not be collected together upon any one spot to fill them; there is a physical impossibility in the matter, and as things are now arranged, the education of these districts must be valued at nothing. Is then the task of education, in places such as these, to be given up as impossible? or are the children to be left to the scanty and unsystematic teaching of a Sunday school? or rather, is not some other plan to be devised for meeting the peculiar requirements of the case? To adopt the trite apophthegm of Mahomet and the mountain, it would seem to be the most natural and easy way of solving the difficulty, to say, that if the children cannot come to the school, the school, or rather the schoolmaster, must come to the children. Supposing that there is a district 12 miles by 6, forming one or part of more parishes, in which there occur four groups of houses, each 10 or 12 in number, and including those within about a mile from the centre of each group; that these groups are several miles from each other, and that, besides them, there are isolated cottages or small farmhouses among the hills, the parish church and its surrounding cottages, with the incumbent's house, if there is any, and if the incumbent is resident, being one of these groups. In this, which is by no means an uncommon kind of district in Wales, no good school could be supported, I would rather say filled; there might be one of 20 or 30 children in attendance, more or less irregular, and a master might starve in it at a salary of 15*l.* to 20*l.* a year.

Would it not be much better to make arrangements whereby a schoolmaster might visit group A on the Monday morning from nine o'clock to 12; call together the eight or 10 children who would probably attend him; proceed to group B the same afternoon, and collect its children from two o'clock till five; go on the same evening or the Tuesday morning to group C; repeat there the operation of Monday, and visit group D the same afternoon with the same object; then recommencing with A and B on the Wednesday, and so filling up the rest of the week with his visits till Saturday evening? While the master should be absent from any group a duration of 45 hours, his scholars might be employed partly in working with their parents, and for a small portion of their time, in the evening perhaps, preparing lessons against his next visit. Of course the instruction so communicated would be scanty, the education imperfect, but, such as it would be, it would be better than none; and even the nine hours a week thus given to each collection of children would, under a proper system, and in the hands of a man of good sense, produce a notable effect by the end of the year. An improvement upon it would be for the master to live in one of the groups of houses, and to ride in and out daily on a pony; his time and his health would be equally consulted by such a plan. An apprentice or paid monitor would also be of much value. It would require for the success of such a scheme that a room of some kind, more or less suitable for the purpose, should be found in each group; and most probably, supposing that one could not be erected, for I am taking for granted that the district is a poor one, farmers would be found willing to give the use of a room for a small remuneration (I should hope gratuitously if they took it in turns), for the few hours which the children, including their own, would occupy it during each day. Four groups of houses like these would supply probably forty children between them in ordinary attendance, and your Lordships know from the educational statistics now in possession of the Privy Council Office, that this would imply the raising of 40*l.* or 50*l.* a year for the master. On the lowest supposition such a district, aided by a small capitation fee from the Parliamentary grant, would be able to support a suitable master at such a rate of remuneration, a rate amply sufficient for a great part of Wales. It seems to me that a circulating school of this kind conducted with energy and good sense, and embracing within its sphere of action all the disposable children of a district, would be more effective than the torpid, half-starved, dirty, and neglected school, with a score of children attending it irregularly, which would probably be maintaining a precarious existence in one of the groups containing the church, and totally out of the reach of the children in the other three. If Madam Bevan's trustees would consent to dispense the funds at their disposal (900*l.* per annum) in a more judicious manner than at present, by breaking them up into grants of 5*l.* each for the use of poor village, or rather mountain schools, and if the trustees of Mr. Betton's charity (the Worshipful Company of Ironmongers) would withdraw all their grants from schools in towns and populous districts, and from all schools except

the poorest, and if they would, for both of these excellent charities, cooperate with the Committee of Council on Education, I feel persuaded that by the adoption of some schools, such as is mentioned above, or by some modification and improvement of it, education, in a fair sense of the word, might be carried into valleys and remote corners of Wales, where, under the present order of things, I do not see any reasonably near prospect of its being enjoyed."

As an administrative question it is to be noted that no one local administrative body, as at present constituted in England, would be competent to render in a satisfactory manner the services required for the better direction of the existing educational means. The municipal corporation would be ineligible from its being a party political body, and for other reasons, some of which will be found spread over the evidence taken before the Committee of the House of Lords, on the effect of rating small tenements in towns. Nor would the board of guardians be well fitted for the service, though it is not a political body, and is in many respects better constituted for the purpose. Both bodies would be ineligible, and most of all the quarter sessions, from not comprising the clergy or the ministers and representatives of different religious denominations, nor persons specially interested or qualified for the superintendence of educational establishments.

The upbringing of the general juvenile community is a service of sufficient magnitude to engage the best available services of a specially appointed and strong local body. The experience of the working of the provision appointing magistrates, that is to say, the leading landowners, as *ex officio* guardians, would commend its adoption in respect to a district educational board.

The information which I was enabled to obtain from eminent professional educationists assembled at the meeting of the Association for the Advancement of Social Science, held at Glasgow, tends to prove that the progress of popular education in Scotland has been grievously retarded, and its present condition weakened and deteriorated by theological divisions, which have occasioned aggregates of children sufficient for one tolerably good school to be divided between two or more inferior schools, unavoidably inferior in every way, giving necessarily a longer and inferior and in the end more expensive education, and preventing or destroying those gradations of schools which were once held forth as characteristic of the Scotch educational arrangements.

The novelty to many of the principle of administrative combination which I advocate, and its great importance, may claim for it a mature consideration in varied and extended aspects. I therefore earnestly solicit particular attention to the following exposition as given to me by the Rev. T. A. Morrison, M.A., the Rector of the Free Church Training College, Glasgow, in answer to my inquiries as to the general waste of educational power and funds from the want of administrative combination and consolidation in Scotland. I may present this exposition as a representative view from Scotland, applicable, *mutatis mutandis*, to the whole of Great Britain. In the communications which I have had with Professor Pillans of Edinburgh, who has been termed the Nestor of education, he has expressed to me his concurrence in the chief conclusions which my information leads me to submit.

In answer to my inquiry as to examples of gradations of schools in Scotland, Mr. Morrison states,—

“Such a thing as gradation is unknown even in towns where it might be most easily obtained. In each separate school the gradation of the scholars may be as good as it can be made; in many schools I know this to be the case; but, regarding schools in the aggregate, gradation is unknown. This may be well illustrated by a reference to the state of matters in Glasgow. Glasgow schools may be divided into three classes, which will nearly embrace the whole:—

“1st. High or grammar schools = Burgh schools.

“2d. Congregational schools.

“3d. Adventure schools.

“The first class is intended to give a complete elementary education in English, classics, and mathematics to the children of the middle and upper classes, and to prepare young men specially for the University.

“The second class is upheld by the different religious denominations, and is largely aided by the Committee of Privy Council. It is intended for the artisan population, small shopkeepers, &c.

“The third class is very nondescript, ranging from the highest west end establishment, charging enormous fees, to the penny a week school in the lowest part of the city.

“These three classes of schools bear no necessary relation to each other. Each class professes to give a complete elementary education within its own limits. But not only is this the case, the schools in each class have no sort of relation to one another. *Each school is independent of every other school.* In any school in any one of the three classes you will find children of all ages and at every stage of advancement. This is a true picture of the condition of almost all our schools, and the description is equally applicable to rural districts and small towns. There is no sight

more common in rural districts of Scotland than this: a small parish is divided into two, sometimes three leading sects. Each sect has its own school and schoolmaster. In each school you will find from 60 to 70 scholars whose ages range from six to 14 years. Each schoolmaster has to teach all these scholars the various branches required in the district.

“The waste of educational power on such a system is enormous. I believe there are at present as many teachers in Scotland as could teach all the children who ought to be at school, if a proper system of administrative combination were adopted. Owing to the want of such a system the energies of many teachers are thrown away. The expense of education is, in the case of adventure schools, much greater than it ought to be; and the incomes of the teachers of congregational schools much lower than it might be, and ought to be. In country districts a teacher and an assistant could easily teach all the children of the two or three SECT schools to which I have alluded. The education in this case would be better, and the progress of the children greater, inasmuch as experience shows that children can be taught more easily and more quickly in large masses than in small detachments; while at the same time the money expended on the two or three schools would afford much higher salaries to a master and an assistant than to two or three independent teachers. I believe that in all, almost all, the agricultural parishes in Scotland the combination of all existing schools into one could be easily accomplished, were it not for the lamentable prevalence of sectarianism. By having one head master and one or more assistant, as the case might be, the teaching would, as I have said, be better, the progress more rapid, the emoluments of the teacher higher, and, as a natural consequence, his social status would be materially raised. I give it as my decided opinion, based on a pretty large induction of facts, that the great increase of isolated and independent *sect* schools in the country districts of Scotland has had a direct and perceptible effect in lowering the social status of the teacher. *Such a combination as I am supposing would have a directly contrary effect.* Again, another way in which this combination would operate very beneficially would be in enabling school managers to obtain the services of a qualified schoolmistress to assist in the education of girls. At present very little provision exists in Scotland whereby female influence may be brought to bear upon girls. In many schools no provision exists even for sewing. Nor do I well see how this state of matters is to be remedied except by combination.

“If the schools now existing are to provide each a female teacher, either they must face a great increase of expense, or, if they are not prepared to do this, they must be content to obtain the services of a badly qualified mistress. Judging from facts which are transpiring, I am afraid the latter alternative will be adopted; and I need not point out the disastrous effects which the adoption of such an alternative must produce upon the female education of the country. The combination of the agencies which at this moment exist in the country districts would at once set free

funds amply sufficient to secure the services of a fully qualified mistress. An illustration may give point to all these remarks :— A country parish has three schools, with an average attendance of 60 pupils each. The income of each master may, from all sources, amount to 65*l.* a year, or 195*l.* in all. The 180 children could, as we have said, be taught better and more quickly in one school with, say, one master, one assistant, and a mistress; and the sum at our disposal would enable us to give the master a salary of 100*l.*, the assistant 55*l.*, and the mistress 40*l.* The master's salary would thus be raised from 65*l.* to 100*l.* a year, and his social status would rise in proportion; the school would be better taught, and effectual provision would be made for the due instruction of girls. I am of opinion that an investigation into the state of educational matters would easily demonstrate that the salaries of teachers might be raised in the ratio I have indicated, *without incurring any increased outlay.*

“ In villages and small towns the waste of educational power is still greater from the want of administrative combination. The remarks already made hold good here; but a very important fact has, in addition, to be borne in mind, in order rightly to estimate the loss of educational power. As matters stand at present, not only are the children taught in small groups, but each master has to teach children of all ages and at every different stage of progress. Now, were there proper combination and gradation, all the infants of the village or town could be taught by a master specially qualified for an infant trainer, when, in such a case, the sympathy of numbers might be brought to bear as a great motive power for good. At present these little ones are generally left to the tender mercies of raw untrained lads; or, more commonly still, are doomed to silence and confinement for weary hours together. Still farther, combination and gradation would enable us to secure separate masters for the different branches, when once the children had passed beyond the stage of infants; that is to say, we might have a man, whose especial *forte* was English, as English master; another, in the same way, as commercial master; and, when requisite, another as classical master. At present, in our small towns, almost every teacher professes to teach all branches, from the alphabet to Homer. The consequence is, that whilst our elementary education is, on the whole, good, the higher education is positively deteriorating. I believe that no greater benefit could be conferred upon the elementary, but particularly upon the higher education, than combination of existing agencies and a gradation of schools, which would enable pupils to enjoy without any additional cost the services of distinct masters for distinct branches. While the gain to education would be thus great, the gain to the teachers would, in every point of view, be still greater. In many of our burgh schools, the teachers, many of them accomplished men, are miserably underpaid; or, if they realize anything like a decent livelihood, it is only by forsaking their own proper function, and by entering into competition with the teachers of elementary schools. Hence, in many cases, these burgh schools have lost their distinctive character as seminaries for the higher education,

and have degenerated into mere elementary schools. Any increase to the salaries of the masters of these burgh schools which might be given would not, in my opinion, remedy matters. Nothing but combination and gradation can restore them to their proper position. Such combination would leave elementary schools to do their proper work, and would throw into burgh schools, properly so called, all those pupils who, desirous of the higher education, at present obtain it in a very diluted form.

“In large towns the waste of educational power and means is almost incalculable, and is not compensated for in any superiority in the education supplied. This remark is particularly applicable to the large class of adventure schools intended for the wealthy classes. Their number is legion; the attendance in each is, on an average, small; the fees are exorbitant, and the teaching by no means of a high order. In regard, however, to a national system of education, schools of this description may be left out of view. It may be simply remarked that, were parents of the wealthy class to combine together, and have their children taught in large thoroughly organized schools, they might have an infinitely superior education for their children, and at a much lower price, than they at present enjoy. Looking to the real design of education, it is not too much to say that the children of the labouring and middle classes in our large towns receive a much better education than those of the wealthy class; and this I attribute to the fact, that the former are taught in large well-organized schools, while the latter are taught in small schools, and often by wholly untrained men.

“Leaving these, however, out of view, and taking into account those who might be the objects of a national system, the want of combination and gradation leads to a great waste of power, and to a deterioration of education; and this from the same causes which operate in the cases previously referred to. Were schools properly graduated, the means both in men and money at present available would be well nigh sufficient to educate all the children who ought to be in school. In large towns combination and gradation might be so easily effected, from the fact that the children all reside within limited areas, that it might be at once carried into effect; and I have no doubt the result would be a better education, a truer recognition of the position of the teacher, higher remuneration, and a better social standing than at present exist. This is the opinion of every intelligent teacher with whom I have conversed. The remarks made on schools in rural districts and in small towns apply to the case in hand; and I need not enlarge. I may simply state, that, under such a system of combination and gradation, we could have,—

“1st. Infant schools.

“2d. Elementary schools, divided into,—

“a. English departments.

“b. Commercial departments.

“c. Writing departments, &c., to any extent desirable.

“3d. Schools for classics and mathematics.

“4th. Schools for modern languages, drawing, &c.

“ I need not point out the enormous outlay incurred in upholding a staff of inspectors for *sect* schools; the immense increase of correspondence and of clerks (and of consequence, money), arising from the same cause; the great waste of actual paper and printing. The want of combination leads to waste in every direction. Half the paper, half the printing, half the clerks required in the office in London for Scotland might be easily saved, as well as half the travelling expenses of the inspectors.

“ Administrative combination in Scotland might be easily secured, from the fact that almost all the pupils learn the same catechism. The religious element forms no ground of separation. The writer is principal of a school attended by about 900 pupils, who belong to various Presbyterian denominations. *No difficulty has ever been experienced in teaching them the same religious lessons*, and I am persuaded that no practical difficulty exists in Scotland. With the exception of a very few, all the children in Scotland might be taught under the same roof and by the same master. This is the opinion of nine-tenths of the people of Scotland, if we are to judge by the sentiments of all who speak or write on the subject.”

All the above as to the economies practicable, it is to be borne in mind, is to be taken as irrespective of the economies from the use of the same educational power for teaching double sets on the half-time system; a system which, though talked and written about, I did not find really understood or practised in connexion with the textile manufactures or others in Scotland. Neither does it comprehend the economies in years of time, attention, and expense from teaching on a large scale, or in half the usual number of years.

From Mr. Donaldson, however, the head master of the same training college, I have received evidence of his experience of the teaching power on a large scale in strict analogy with that derivable from the evidence of teachers of district and other large schools in England, appended hereto, and indeed from Scotland, that the three elements of instruction, reading, writing, and arithmetic, may by appropriate educational power be imparted well in three years, or half the usual time. In respect to the time children can closely and voluntarily attend to lessons, he states:—

“ Children of from 5 to	7 years of age,	about	15 min.
”	7 to 10	”	20 ”
”	10 to 12	”	25 ”
”	12 to 16 or 18	”	30 ”

I have repeatedly obtained a bright voluntary attention from each of these classes for 5, 10, or 15 minutes more, but I observed *it was always at the expense of the succeeding lesson*; or, on fine days,

when the forenoon's work was enthusiastically performed, it was at the expense of the afternoon's work."

Mr. Morrison, the rector, gives the following corroborative testimony as to the psychological principle on which the half-time school system was based,—the natural limits of the capacity of young children for profitable voluntary attention:—

"I am of opinion that much of what is taught in elementary schools is comparatively useless, unfitted for children, and in many cases positively prejudicial; and particularly I hold a very decided opinion that the hours of school attendance are unreasonably long. I will undertake to teach 100 children in three hours a day as much as they can by possibility receive; and I hold it to be an axiom in education, that no lesson is *given* until it has been *received*. As soon, therefore, as the *receiving* power of the children is exhausted, anything *given* is useless—nay, injurious, inasmuch as you thereby weaken instead of strengthen the *receiving* power. This ought to be a first principle in education. I doubt it is seldom acted on."

As the line drawn of three hours' daily instruction may be objected to by teachers who have practised the half-time system for longer hours on alternate days, as well as by teachers of the ordinary long time of five and six hours daily, I may here state that the conclusions enunciated in respect to the limit in question are derived from the experience in teaching children of the wage classes, the great majority of whom would be under 11 years of age. I would call attention to the following questions, and the deliberate answers obtained of the most eminent school teachers in the country.

To Mr. Wrigley, the head master of the celebrated parochial school of Rochdale, which contains upwards of 700 children, and who has had under his tuition about 4,000 "half-timers," I put this question,—

"What time is occupied by prayers, by the changes of lessons, and in recreation?—About 40 minutes.

"Then for the other instruction the time occupied by the factory or half-time hands would be about two hours and one-third. Do you find that that time, the two hours and one-third, is as long as you can profitably occupy them?—I think myself that we really are at the limit of profitable attention with them. But I consider that we can and do keep up the attention during the two hours and one-third."

The head master of the National school near Rochdale, who has 220 pupils, in answer to the question,—

“How much of the half-timers’ school time will be occupied in prayers, roll calling, and changing classes, or otherwise than by direct book instruction?—About half an hour.

“So that in direct book instruction their time will be about two hours and a half. Could you exhaust the children’s power of voluntary attention for the day within that two hours and a half from day to day?—Any master may possibly keep up the attention for two hours and a half with the higher classes of scholars, by having short lessons and frequent changes of subject. With long-time children two hours in the morning and one hour in the afternoon, would exhaust the power of voluntary attention. Writing is a sort of mechanical employment for which the same attention is not requisite. Generally the half-timers are more intelligent than the full timers.”

Mr. George Atkins, the head master of the Zion British training school at Oldham, one of great celebrity, and which has 280 pupils, was asked,—

“Would you extend the time of the half-time scholars?—No; I think the teachers would be exhausted within that time if they teach with vigour, and that the scholars attention could not be secured for a longer time than the present time of the half-time scholars.”

The second teacher in the school of Mr. Bazley, M.P., was asked,—

“Would you extend the time of the book instruction of the half-timers?—No, I would not extend the book instruction, for they have now as much as they can take in, but they might have more exercise and amusement.”

The evidence of all the best teachers of wide experience was to the same tenor, and was clear and decisive. It was equally decisive that the attention of the half-time scholars exhausted within the limits stated is brighter and better than that of the full-time or day scholars. Some testified to the equality of the book attainments of the half-time as compared with those of the full-time scholars, but the majority gave evidence that the attainments of the half-time scholars were eventually, or before they left school, superior to those of the full-time or whole-day scholars.

Objections have been made to the conclusions from the comparison of the attainments of the factory half-time scholars, on the alleged grounds of difference of ages and greater regularity of attendance of the half-time scholars; but the chief witnesses refer to the experience of fairly similar conditions; and in the Poor Law district half-time

schools the conclusions have been obtained from the experience with children of the same class, the same ages, the same teachers, and the same systems of teaching, and perfectly regular attendance. The Rev. J. P. Norris, one of Her Majesty's school inspectors, states to me that he considers that "the best of all arguments in favour of " half-time schemes is that drawn from the practice of all " girls' schools. All girls get their literary instruction " on a half-time scheme," one half the school time being employed in needlework, "and the results are intellectually " as good and morally better than in boys' schools."

The results have, moreover, been tested by examination, an art which has made satisfactory advances;*—by examination and comparison of their attainments with the attainments of long-time scholars in the same schools, under the same teachers and the same system, and with the same constancy of daily attendance. They have, moreover, been tested by comparison of their attainments with those of long-time pupils taught under trained masters using various methods, all deemed good. But above all, the capacities of the short-time pupils for applying their attainments in the service of life have been widely tested and compared by employers with those of the ordinary long-time pupils, with very remarkable and most important results in the proof of superior aptitudes and value on the part of those who have been trained in habits of more concentrated attention and greater mental activity during shorter time. The like grossly neglected, or, as I may term it, the newly applied test, the "service test," is proportionately favourable to those who have been long-time day pupils, but who have been taught with large numbers in schools where, by means of the superior classification and systematised teaching, they have had the same or a greater amount of attainment imparted to them in a shorter period of years, and have thence had imparted to them habits of greater mental alertness than those taught in small schools of inferior organisation.

On the other hand, where the half-time principle has been carried out on alternate days, with the common routine practice on those alternate days of six hours' book application, giving 18 hours of it in the week instead of 36, the testimony of those teachers is unanimous

* *Vide* Mr. Tufnell's evidence.

that the six hours' teaching on the alternate days is too long, injurious to the teachers, and exhaustive to the pupils; but those teachers say they could sustain a profitable attention for four hours and a half on the alternate days, or $13\frac{1}{2}$ hours instead of 18 hours in the week. The majority of the school teachers who have tried both methods prefer the half day to the alternate day practice; and the evidence appeared to me to preponderate in favour of the half day, in respect to the quality of the labour obtained in the field or the manufactory, as well as the quality of the instruction gained in the school. The half-time system on alternate days, whatsoever may be found to be the best duration of the school hours, appears to me however to be eligible for adoption in some important industrial conditions, and especially in the conditions of thin and widely spread populations, such as those hereinbefore described, for the convenience of circulating masters. But the question as to the psychical fact of the actual limits of the capacity of profitable attention, which varies at every stage of bodily growth and mental training and subject matters taught, and with the mode of teaching, and very largely with the sanitary conditions of light and ventilation, is yet determinable, like physical facts, by experiment and observation, which require to be carefully made. The more the subject of the psychical limits of profitable attention and mental labour is examined, the more narrow they will, I believe, be found to be,—narrower even than the lowest average stated. I dissent from the course of striking a mean between the limits of extreme practice, it being a mean in error. The apparent contradiction in the testimony which I have collected of able half-time teachers, between those who state that they can and do exhaust the attention of the average of children in two hours and a half, or little more, and those who say that they can and do sustain attention for four hours and a half, is to be explained chiefly by the difference in the quality of the attention, whether diffused or concentrated, intermittent or combined. In good infant schools the interest and the attention of the children may be said to be kept up, with their little drill and changes, and singing and other lessons, for five or six hours, of which time a very small proportion indeed is occupied with lessons requiring mental effort. It will be an apparent improvement of the teaching of classes of advanced ages to assimilate to that of the infant school by an extensive introduction of bodily

changes and exercises. It is to be observed upon the time tables of those who are for four hours and a half of daily schooling, that they do, in fact, comprise an extended proportion of the subject matter of what are called "relief lessons," the advantages of which I did not find to have been tested and proved by proper examination and comparison. Confining the teaching simply to elementary matters, it may be observed that Mr. Macleod, head master of the Royal Military Asylum, Chelsea, states that reading, writing, correct spelling, composition, grammar, and arithmetic may be taught in *two hours* of daily instruction, for which he gives a valuable time table; those elements, he states, are imparted in that time to a more difficult class of adults than most boys. In respect to the ordinary long-time schools, it is utterly delusive to suppose that the attention and mental effort obtained in them is proportionate to the time in which the children are kept in school. The Rev. F. A. Cook, one of Her Majesty's inspectors of schools, in his report on the schools inspected in Middlesex in 1859, and of the methods of instruction prevalent in them, says, "The most prevalent and characteristic faults of the methods now in general use is waste of time. I have calculated in schools bearing no low character for efficiency that *one-third* of the time allotted to teaching is either lost or occupied with mechanical details, partly superfluous, partly detrimental to the general progress of the school work." In the smaller class of schools the waste of time is much greater, and the common practice in many of them is thus described in a report by Mr. P. J. Keenan, chief of inspection to the Board of Education in Ireland. He says, "Suppose the school to contain 30 children, the smallest number which the Commissioners recognize as constituting a school, and suppose it to contain three classes, first, second, and third; the master calls up the third class to hear them their lessons, at the same time telling the first and second class, who are seated in their desks, to be quiet, and 'to prepare their lessons;' these classes of course do nothing, although they may occasionally counterfeit the preparation of the lessons. When the third class children, however, are heard their business, they are sent to the desks to prepare for something else, and the second class are then called up. But as the pupils of the first class have said or done nothing, and if the day were fine or the school-room were badly ven-

“tilated, it would have been better for their minds and
 “bodies if they had been out in some neighbouring field
 “or on the road side amusing themselves. By and bye,
 “however, they are called up, and thus the rotation goes
 “on.” But, he says, if the teacher worked unceasingly
 during the whole five hours of the school time, each child
 would be on the average “only *about one hour and forty*
 “*minutes under tuition.*”

If it were proved as a psychical fact that little children between seven and 10 or 11 years of age can sustain five or six hours of daily mental effort, we must bear in mind the evidence to the physical fact that such an amount of sedentary constraint is bodily injurious to them. It suffices, that adults or young persons in the advanced adolescent stages find five or six hours' mental sedentary labour a full stage from day to day, to establish the fact that the same stage is an injurious excess for younger ages.

If I were to admit the declaration made to me by an eminent school teacher, that it is possible to sustain the attention of little children for five hours each day, “for “he does it,” I must nevertheless object that, as he stated to me, under his system he only imparts complete instruction in reading, writing, and arithmetic, in about four years, to a child beginning at seven, from a good infant school, the question as to the quality of the attention and instruction is decided by the fact, that in a good half-time school, even in the alternate day practice, the same amount of substantial instruction is given in from two years and a half to three years.

Since I have completed my own researches in England, I have learned that the results of the half school-time of three hours' literary instruction, with four hours' industrial work on the farm, adopted in the agricultural schools in Ireland, are decisive not merely as to the equality, but the superiority of the half-timers in mental as well as bodily progress and aptitude over the pupils of the same ages who were devoted exclusively to book instruction. I find also that the late Mr. Jelinger Symons, in his capacity of inspector of schools, had for a long time given special attention to the subject, on which he stated, “I could
 “multiply evidence from persons who have witnessed both
 “systems, successively tried under their own eyes almost
 “*ad infinitum*, and bearing universal witness, that alike in
 “moral improvement, mental vigour, facility of scholastic

“ attainment, bodily health, and actual increasing industrial
“ power, there is no question as to the superiority of a
“ system which divides the day between bodily labour and
“ literary learning over the exclusive routine of book
“ schooling.” He urged that our schools are not what the
people need; that is why the people slight our schools,
“ and that the remedy is to make them with all speed
“ schools which train minds and bodies, not for literary
“ leisure, but for the active business and pursuits of life.”

The recent public competitive examinations appear to demonstrate an improvement in the saving of time in years, as a consequence of less slothful and improved methods in superior education. The large proportion of successful competitors of the shorter school periods has, I am informed, been a main reason with the Military Council of scientific education for lowering the age of candidates for admission by open competition to the Royal Military Academy at Woolwich. Some able school inspectors have assumed the proper normal school period to be 12 years. At the educational conference presided over by His Royal Highness the Prince Consort, the period was generally assumed to be 10 years, that being the period of school life in Holland, Prussia, Switzerland, and other states of advanced popular education. I have obtained the educational statistics of the examinations conducted throughout the country by the Society of Arts, these being what may be considered examinations of an advanced middle class, as to the school periods of the candidates. It appears that the average period of the first year's candidates, 310 in number, was less than six years and six days; that the school period of 525, the second year's candidates, was six years and two months; that the school period of the candidates for 1860, who were 625 in number, was six years and four months nearly. But it appears that in the first year for the first-class prizes for the higher class of subjects of philosophy and science, those whose average period of school life was only three years and seven months obtained more than twice as many of the highest places as those whose average school time was seven years and eight months; that in the second year, those whose school period had been under four years obtained about one-third of the places, in proportion to their numbers, or did as well as those whose school period had been seven years and about nine months; that in the last year, the pupils whose school time had been a little over four years

obtained more than half the highest places for geometry, logic, book-keeping, German, Latin, and Roman history, against those whose school period had been seven years and a quarter. These facts may be taken as displaying decisive *tendencies*, but the numbers of the prize scholars appear to be too small as yet for definite conclusions.

I have found some of the most accomplished school teachers the most tenacious of long periods of years for the retention and occupation of their pupils, and very naturally, for the teacher's zeal makes him desirous to impart not merely rudimentary instruction, but to send forth his pupil with as high a polish as the art of teaching may achieve; but in respect to the labouring classes, the parents' necessities do not admit of the longer periods of instruction, and it is a matter of necessity to limit the efforts to instruction which is strictly elementary, and to giving the pupil the means of acquiring further skill himself in the course of his daily life, or in evening adult schools. It is to be borne in mind that the inducements to the practice of reading have in recent times been largely extended to the labouring population. In one manufactory, where upwards of 500 mechanics are employed, I ascertained upon inquiry that whereas little more than six years ago very few were known to read, now between 200 and 300 are known to take in cheap publications, chiefly the penny weekly journals, such as Cassell's Illustrated Family Paper, and other literature of the like character, and some of the penny political journals, the general quality of which appeared to be very good. I have heard some of it objected to, which I did not see; but admitting all that may be said in disparagement of some portions, it may be proved that it can scarcely fail to expel from the dark and festering minds of non-reading populations ideas and impressions that are worse, and that could scarcely by any possibility be circulated in print; such, for example, as we found so late as the last severe visitation of cholera prevalent in the lower districts, even of Scotch towns, that wells were poisoned, and that sanitary officers of the Board of Health were really sent to propagate the poison and thin the population.

I have endeavoured to keep the half school-time question, or the question as to the limits of the capacity of attention and of profitable mental effort, clear of questions of the nature of the subject matters taught. But it is

proper to state, that even in the better half-time schools which I visited it appeared to me that almost all the subject matters were susceptible of improvement, with an augmentation of interest for voluntary attention, and of beneficial effect upon the pupils within the reduced time. Clergymen expressed to me strong opinions that the religious teaching urgently requires revision.*

* The Rev. Mr. Brookfield, on the subject matters taught, says, "Meantime it is an undoubted fact that in schools where Scripture only is taught, it is learned with almost no intelligence. The misconceptions as to time and place, and the relation of one event to another in the minds, not of children only, are amazing and too ludicrous for me to record them in connexion with so grave a topic." *Vide* also the evidence of the Rev. Isaac Holmes, the Principal of the Kirkdale school.

"But with regard to teaching the catechism without due explanation, or with imperfect ill-adapted explanation, with regard to forcing it upon years too tender to be capable of explanation, in the hope that it will be remembered and resorted to as to a hidden, but too long forgotten, treasure afterwards; with regard to blowing such notes coldly into the bugle and suffering them to freeze there in the blowing, in the hope that afterwards, by the fireside, they will thaw and melt into consecutive melody; I do not believe that such an expectation is warranted by rational probability, or consistent with authentic experience. It grieves me—who am not prone to use such words—it grieves me to think how this daily half-hour—which is usually spent in learning the catechism by rote, and with such poor success—might have been spent in learning small portions of it, such as the Lord's prayer, the commandments, and the duties towards God and our neighbour, thoroughly and well, and with intelligence,—and with really apt and appropriate Scripture illustrations; and how, in the course of those years which result in such grotesque results as I have recited, almost every recorded word of the Redeemer might have been stored in the memory, never to be forgotten."

It was admitted and regretted by the clergy with whom I communicated, that there is great neglect at the same time in teaching the "minor morals." I fully agree with Mr. Brookfield in his expositions of the common omissions, *e. g.*, the following:—

"I cannot, however, refrain from giving an instance of practical interpretation from a boy of 11 years, living on the banks of the Thames, which might be profitably adopted by many persons of riper years, and of more exalted station.

"Tell me of any state of life to which it may, perhaps, please God to call you?—A waterman.

"Well, how would you do your duty in that state?—Take no more passengers than the licence says.

"Well, anything besides?—Behave civil to the passengers.

"Anything else?—Land 'em dry on the other side.

"Anything else?—Ask no more than the regular fare.

"Anything else?—Keep some of the money for my father and mother.

"Anything more?—Try to lead a good life.

"I have heard in my time more lengthy and less complete com-

In respect to the secular teaching, I found the pupil's attention sadly misdirected in the reading lessons. In one school the teacher chose a lesson to show me how perfectly his pupils were got up in the genealogy of the Plantagenets and the Stuarts. It would have been more interesting to the pupils, and more satisfactory to the parents, and far more useful, if they had been well got up in the genealogy of wages, as unfolded by Mr. William Ellis. I found it agreed that handwriting may be better taught in half the usual time occupied on the common method. In teaching drawing, which Mr. Imeson, the head master of the central district school of London, considers, I think justly, almost as important as handwriting, as a branch of popular education, yet the common lessons, instead of being on every-day subjects of obvious utility, were of useless ornamentation, calculated to excite the prejudices of the guardians, and lead them to believe that the teaching was a useless expense.* Those who will peruse the instructions to teachers, framed by the late Mr. Horace

mentaries on 'your duty towards you neighbour,' than 'undertaking 'no more than your boat will carry, claiming no more than your 'regular fare, and landing them dry on the other side.'"

* Mr. James Nasmyth, Esq., the eminent mechanical engineer, and inventor of the steam hammer, states, "Speaking from my own experience of working men, I am satisfied that could we only pay more attention to educating the eye and bringing forth the often latent faculty of comparison, a most important benefit would result not only to the workman, but to the perfection of the manufactures of the country. Nine-tenths of all the bad work and botches that occur in our own business of engineers and machine makers results from the want of that mere power of comparison and 'correct eye,' which is so rare amongst such class of workmen; not that the faculty is absent, it is only dormant, having never been cultivated or educated as it ought to be,—of all faculties useful to a working man. The annoyance I meet with, and the vexation and loss I encounter from the simple matter of crooked work to be drilled into true, is beyond all conception to those who are not practically conversant with the very limited power of workmen in general in this respect. When a workman has a correct eye, his work is not only executed with far greater despatch, by reason of not having incessantly to stop working, and occupy his time in looking if he is working correct or not; but where such work results from a mechanic with a correct eye, brought into action by reason of all the parts being in true and accurate relation to each other, all goes off smooth at once and is durable in proportion; and as I am satisfied that the faculty of comparison is latent in all, and in most capable of being developed by suitable teaching in youth, and knowing as I do its vast commercial value, I would most earnestly advise, in all our schools, especially in those for the education of working classes, that much time and careful attention be devoted to the cultivation of this almost invaluable, but at present totally neglected faculty."

Grant, in his infants' and second stage of arithmetic, may see how much the teaching of arithmetic may be improved as an intellectual exercise, and taught in reduced time, by a proper graduation of lessons, to varying ages and capacities of attention, which he most carefully and successfully studied. In the schools for agricultural children I found invariably exercises in abstract and what may be called "town subjects" given to the boys, instead of the proper subjects of rural occupation. I am assured, upon practical experience, that by what is called the simultaneous method of teaching arithmetic, the time and labour of teaching may be generally reduced by two-thirds as compared with the common method, and the teaching is rendered more agreeable as well as more effectual. Eminent school teachers in Scotland, as well as in England, have concurred in the declaration, that if the Legislature would be pleased to attend to the subject and adopt a decimal and metrical system of notation, the entire labour of elementary school teaching would be reduced by more than one-fifth, and the quality of the teaching and of the habit of mind imparted greatly improved. All these improvements superseding hateful tasks, and with the reduced time rendering the school attractive instead of repulsive, and abolishing corporal punishment and suppressing the constant barbarous war against the child's nature, and giving an amount of intellectual exercise in the teaching of these elementary branches, I believe the shorter time will be found fully up to the actual capacities of children for profitable mental effort at the ages taught. In respect to the middle class schools, it is to be observed how little the art of account keeping is known or taught to the youth of this great manufacturing and commercial empire, where immense concerns are empirically conducted, and vast loss, furnishing the occupation of the courts of bankruptcy and insolvency, incurred, as the official assignees prove, from ignorance of it.

I find that in consequence of the discussions which these inquiries on the half-time system have raised amongst educationists and school teachers, the representatives of a large section of them, whilst they are yet indisposed to give up the present long school hours "as an advantage," are willing to accept the half-time system "as a necessity," for meeting the industrial demands of the population. I would beg that these respectable

parties may be allowed to read and consider the evidence itself, although I might admit that their conclusion may be adopted for practical purposes, the more so as a large proportion of children are required by the parents to be kept in school for the full time simply to have them taken care of and kept out of the way; and I might accept compromise the more readily since the advantage of introducing the military and naval drills, and systematised gymnastics, appears to be generally admitted by the great body of teachers.

Proceeding on the necessities of the population, I beg here to revert to the consideration of the effect of a consolidation and improved local administration of educational means, and of teaching on a large scale in much less time than under the common practice; and in particular I would call attention to the question to the Principal of the Faversham District School Union, and to his large and pregnant answer, as to the difference in condition between the boy who has been kept at school from his seventh to his thirteenth year, learning the elementary branches of instruction, reading, writing, and arithmetic, and the boy who has learned the same elementary branches as well, or better, in about three years, or by his tenth, or between his tenth and eleventh year, who has left school at about that time, and has been for three years or about up to his thirteenth year in some industrial and productive service.

With three years' wages gained to his parents, with three years' industrial habits confirmed, and with some schooling in life, he will be more intelligent, better taught, and more moral than the one who has been kept in school until the thirteenth year; for what are habits of attention and of honest industry but great primary elements of morality and of sound book precept so far realized? If the boy taught within the shorter school period has had, as he ought to have had, physical training in the military drill, he will have gone into service with the recited previous exercises in habits of order, of self-restraint, of patience, of obedience, ready, intelligent attention to orders, and promptitude in their execution. Under the common conditions of labour, he will be bodily and mentally superior to the lad who remains under the common conditions of school teaching six years to acquire the same amount of elementary book instruction, but without any bodily training.

No doubt the shopkeeper's son, who after having under the system of teaching in the large district school acquired in three years those same primary elements, who has conveniently gone on three years more acquiring the knowledge given in the commercial class, may acquire more and leave by his thirteenth or fourteenth year with a knowledge of account-keeping and an additional stock of intellectual acquisition befitting his position; as may the professional man's son who remains in the high school until his seventeenth, eighteenth, or nineteenth year, and leaves with a stock of classical as well as of scientific acquirements requisite for his position. But whilst we consult the necessities of the labouring man's position and that of his son by securing him wages for a term of years, we secure to him, as displayed in the above example, by the provision of the evening school for adults furnished by the union, a fair opening for retrieving any substantial intellectual deficiencies, or even deficiencies of educational accomplishment, which the early demands for labour may have occasioned. We may also furnish him with an advantageous means of recreation by means of such an institution. On consulting the experience of the manufacturing districts, the chances in the race of life will not be so unequal as may be supposed for those who may have had to devote their time earlier to the ruder industrial industry.

In my observation of the interests of the population, instead of the great educational problem being, as commonly stated, how long a time the children of the labouring classes may be kept in school, it really is in how short a time they may receive elementary instruction, and be freed from it. Instead of sacrificing productive industry, at any stage of working ability, to the convenience of the school and the school teacher,—as regards the wage classes,—I believe it to be thoroughly right as well as necessary that the convenience of the school teacher and of the school should at every stage be made subordinate to the fair demands of labour.* The com-

* It is interesting to learn from an address on the educational equipment of the trained teacher, by the Rev. William Fraser, of Paisley, that Luther was, in respect to the subordination of the school to the demands of industry, "a short-timer." In an address to the councilmen of all the towns of Germany, A.D. 1524, calling upon them to establish and sustain Christian schools, he thus meets, as we now try to meet, the objection of parents of the wage class, "we need our

pulsory provision of three hours' schooling, the half-time system, is not, as it was believed to be, a sacrifice of labour, but is a protection of labour, perfectly consistent with the propositions stated, for whilst in the good half-time schools—the results from the improvement in the quality of the attention—the same acquisitions are obtained as during the longer hours, on the other hand, foremen in manufactories have found out that in the reduced hours of children's labour the attention and the *quality* of the work have so far improved as to remove any substantial grounds of regret on the part of employers, and to justify an improvement of wages beyond the former rate per hour. Whether it be in mental or manual labour, the working of young children during the full stages, whatever they may be, in which adults are exhausted, is work in excess, and as much in waste as it is to work young and growing colts through the same stages as full-grown horses.

Instead of conciliating labour with the school, the great problem is, it appears to me, to conciliate the school with paid labour, and with parents' needs of domestic service. These propositions, I apprehend, meet, to some extent at least, the difficulties proposed for attention by His Royal Highness the Prince Consort in his address to the Educational Conference, when he stated that “the root
“ of the evil,” the general defective school attendance,
“ will, I expect, be found to extend into that field on
“ which the political economist exercises his activity, I
“ mean the labour market demand and supply. To
“ dissipate that ignorance, and to rouse from lethargy,
“ may be difficult, but with the united and earnest efforts
“ of all who are friends of the working classes it ought,
“ after all, to be only a question of time. What measures
“ can be brought to bear upon the other root of the evil
“ is a more delicate question, and will require the nicest
“ care in handling, for there you cut into the very quick
“ of the working man's condition. His children are not
“ only his offspring to be reared for a future independent
“ position, but they constitute part of his working power,
“ and work with him for the staff of life. The daughters,

“ children to work for us.” “And I ask,” he said, “no more than this,
“ namely, that boys shall attend upon such schools as I have in view
“ an hour or two a day, and none the less spending their time at home,
“ or in learning some trade, or in doing what you will. Thus both
“ these matters will be cared for together.”

“ especially, are the handmaids of the house, the assistants of the mother, the nurses of the younger children, the aged, and the sick. To deprive the family of their help, would be almost to paralyze its domestic existence.”

Without presuming to make any comment on this important admonition, but in obedience to it, I venture to submit, that only by combinations of the character of those of school unions can flexible means be obtained, by appropriate classes, half-time day classes, as well as evening classes, with special administrative means, to conciliate the demands of service at the home, the field, or the manufactory. For these purposes there appears to me to be a demand for a new division of official, civil, and administrative labour in out-door service, which cannot be rendered by the school teacher of any grade, whose powers are exhausted by the in-door daily toil of the school. There is required the service of an officer of the position of a Principal, to make house-to-house visitations, as of an educational missionary, to look up those children who attend no school; to inquire from the parents why they do not attend, and to remove doubts, and make arrangements, where necessary, for their accommodation. I have myself promoted tentatively some house-to-house inquiries of this character, and find the results in accordance with those of others, and that they elicit such common answers as such consideration of the labourer's domestic economy as His Royal Highness has evidently given might anticipate. The mother being found at home, and asked why her children are not sent to school, says, “ Why, you see, sir, I must get my husband's breakfast, and put away the things, and do other work; and I cannot get on without Mary to mind the baby.” “ But your son; why does not he attend?” “ Why, you see, sir, he is wanted to carry his father's dinner to the factory,” or the field, as the case may be, “ and to do other errands for me.” Now, however, comes the Principal or the visiting officer's answer, “ But you do not want them the whole day; only three hours daily school attendance are now required, and you may send either or both to a half-time class, or to a class on alternate days.” The information I have referred to by Mr. Charles Paget, the member for Nottingham, as to the working of the half-time system in a rural district, furnishes a practical example of the service required to be per-

formed. The widow's answer to his question, why she does not send her son to school, that she cannot spare his wages, is followed by the further question, "But if you cannot spare the whole of his wages, will you not spare half, not to sacrifice his education and future prospects in life? because if you will make that sacrifice, I will get him a place of work on alternate days, and find him a pair?" and this is met by the answer, "I will." As also in another class of cases,—“But you do not want both your children's service at the same time. Cannot you let one go to a half-time set one part of the day, and the other on the other, or on alternate days?” For such arrangements, including intervention with employers, the services of an officer of the position and authority of the Principal of a large establishment, with flexible means of accommodation at his disposal, are certainly needed.

There are also needed systematic out-door inquiries as to the causes for leaving school, and in the cases of abrupt interruptions of attendance by demands for service, admonitions of the mischief done, and representations that the completion of the education may be accomplished by attendance at the evening class. Where the out-door investigations as to the causes of absences from school lead to the discovery that children are abandoned to vice and crime, the officer should, in the interests of society, call for the intervention of magisterial authority and the aid of the police, as was done with such advantage in Aberdeen and other places in the case of abandoned children, now to some extent sanctioned by the law.

The machinery of well constituted district school unions, with the application of the half-time principle, will, I conceive, be found to furnish the most powerful, convenient, and economical means of providing for the ragged school classes. The chief objection which I have heard in relation to the ragged schools is, that to some extent they draw in as pupils children of a class for whom they were not intended, namely, of artizans in work, and who are competent to pay the school fees, and that they take children away from the regular schools. My information leads me to believe, that to a greater or less extent they do so; but that they do so chiefly from the defective practice and long time of the regular school, and the convenience of the general rule of the ragged schools, that the pupils may come and go as they please, a privilege which

conciliates, to a great extent, the school teaching with demands for domestic service and labour. The half-time principle properly applied* will, in a great measure, meet this difficulty; but the Principal of a district school union may also provide for the really ragged class in a separate room, as suggested in the examination of Mr. Thomas Crampton, which I have cited; or if needs be, and as I believe would often in large town districts be the most eligible arrangement, in a separate building, and at the same time take securities for protecting the business of the other classes of pupils from interference by them. In dealing with these ragged school classes, the Principal would naturally be in concert with the clergy, and with the ministers of different denominations, and with district visitors, and should have the co-operation of the union relieving officer, as well as of the police. He might, with the inspector, aid and separate schools, and voluntary effort animated by strong religious sentiment, in the conditions in which he states, that moral training for the successful reformation of lost characters can be more successfully carried out in small than in large schools.

I was informed by Dr. Edward Jarvis, a magistrate and one of the school committee of Boston, one of the delegates from the United States to the International Statistical Congress, that they have in the New England cities a public officer called a "*Truant Officer*," who exercises functions of the penal class, who may apprehend children who have left school, and summon parents before magistrates, who have the power of fining them for negligence, and of sending the children to some public institution. But these powers, he states, are exercised almost exclusively in relation to children and parents of the lower class of Irish, the class who, in our inquiries into the sources of crime, we found furnished the large majority of

* The following is an example of extensive applicability:—"The master of the Madeley school, in Shropshire, informs me," says the Rev. Mr. Norris, "that he has induced three or four boys, who are employed half their time by provision dealers, to attend school the remaining half of their time, instead of idling about the streets; and the master of Wordsley school, near Stourbridge, tells me that he has four boys attending his school during the first half of each week who are employed the rest of their time in the glass manufacture." He adds, "These boys evidently take more pains and delight in their work, and show more vigour and intellectual energy than those who attend the whole week."

juvenile mendicants and juvenile delinquents to the mendicity societies and prisons of Manchester, Liverpool, and other large towns. For the other social extreme,—for the removal of anxieties of parents of the middle classes,—out-door visits of a person in the condition of a principal are needed, to make arrangements for the preservation of the social position of children in respect to the classes in which they might be placed, and others of the like character. I quite agree with Mr. Paget, when he states that the half-time principle is one which admits of very wide application, and that “our middle classes might give “ their sons, up to the age of twenty, an alternation of a “ day of college and gymnastic exercises, with a day in “ the counting-house; and thus, with God’s blessing, “ confer upon them that inestimable boon, a sound mind “ embodied in a healthy frame.”

The principle of the aggregation of numbers for the division of educational labour, as displayed in its chief features in the example of the Faversham district school union, furnishes the means of meeting satisfactorily the educational wants of widely different classes of society. Whilst beginning with larger and better arrangements for the most important infant school classes, and giving better elementary instruction for the lower and higher middle classes,—whilst providing for the poorest, and yet preserving due distinctions,—the principle is necessary to bring up with economy the elementary education of the whole of the labouring classes to that state of efficiency which is attained only by a minority of the children who now pass through the separate public schools. It will be found to present rigid conditions to the middle classes, requiring them either to allow their children to join in the common primary education, or to incur an increased expense, proportioned to their reduced numbers, to ensure for them an education of an equally good quality. Some portions of the training derivable with economy from teaching on a large scale appear indeed to be utterly out of their reach from any teaching on a small scale. These conditions involve beneficent tendencies, such as are proved to have been frequently derived from an elementary education on one common basis in some parts of Scotland, and will tend to the removal of prejudices and to the voluntary adoption of the principle in question. The extent and first success of any local opposition to the combination of the local means would, however, depend very much on the manner

in which the work of organising them is set about ; upon whether the misrepresentation which sinister interests are sure to make, is allowed to pass without refutation, whether the local community are allowed to remain in ignorance of how much they lose by separation, and whether the truth is properly brought home to parents, that by the consolidation of the local means, their children may receive a superior physical as well as mental training, and be rendered more apt for employment, as well as more accomplished, at far less expense of money and time, and with far less uncertainty of moral and social result than is now incurred. In such a case as that of Faversham, for example, the dominant majority might be shown that the cost of an intolerant exclusion of the dissenting minority would be that the time of imparting a given amount of instruction to their own children must be increased by at least one-third, and the expense in even greater proportion ; and on the other hand, a minority, under bigoted and intolerant leaders, might be told that the penalty for schism must inevitably be full double time and more than double expense for an inferior education of their children. Whilst religious communities would, with the right of separate religious instruction and of visitation by their own ministers, lose nothing by a consolidated secular inspection, which is desirable on the score of economy, their flocks would gain by the supervision of secular instruction by inspectors of the widest range of observation and practice. Those who have children at endowed educational charities should be shown, as they might be in the great majority of instances, that that which they have received as a privilege is in reality, in relation to the present state of the educational art, a serious injury, and its abandonment a benefit to their children. But the share I have had in the business of the formation of upwards of between six and seven hundred new administrative bodies, which we prepared for under the Poor Law Amendment Act, and the institution of nearly two hundred Local Boards of Health under the Public Health Act, warrants me in expressing a confident opinion that if the work be initiated under competent superior direction, with a complete mastery of the principles and adequate zeal for their application, school unions would be early formed (in effect) voluntarily in sufficient numbers for the mature organization of the system, and its extension with progressive experience.

The procedure for the constitution of district school

unions might be analogous to that for the formation of Poor Law unions, or of the union of local administrative bodies as Local Boards of Health, by Order in Council, under the Public Health Act.

One of Her Majesty's school inspectors, an officer who might be called a special administrative "organiser," should, under instructions as to the principles involved, visit, examine, and ascertain closely the educational needs of the district. His attention should be directed in the first instance to ascertain what numbers of children were not at school, and why they were not. To do this properly, he should make direct house-to-house visitations, and see the parents or some of them. For this he would require assistance. He should extend his house-to-house inquiries to the parents of children of all classes, and examine the book attainments of the children in their presence. Having completed this investigation, which would require some time and labour, he would be in a condition to examine the educational appliances of teachers and schools, and determine their adaptability to meet the ascertained requirements, or the extent of supplementary means, if any, needed. He would of course put himself in communication with the clergy and the authorities, and the heads of various religious denominations. The terrible insanitary condition of many of the common school houses making them sources of disease, and often the chief fever nests of a district, would require the attendance of a special sanitary engineer or architect, in aid of the organiser, for the consideration of the structural arrangements and apportionment of buildings.

With the preparation obtained by a preliminary examination, he might hold an open public inquiry, in which he would hear the representations of parents and persons interested in the educational arrangements of the district.

Having mastered the material facts, he would prepare a report addressed to the Privy Council, but framed for local publication; mainly to display to the inhabitants the real state of the education of their children, and the improvements that might be effected, without increased expense, by the organization proposed. The report would conclude in the terms of orders submitted for the approval of the Privy Council, for the constitution of a district educational board, partly elective, partly *ex officio*, by whom the amended scheme of education should be executed. The report should be printed, and circulated locally, to give

time for any appeal or representation from the parties interested before final adoption of the Privy Council.

The parties whom I met at Faversham stated that the formation of the school union was only accomplished at an expense of annoyances and labour such as, if they had been foreseen, might discourage attempts to effect such improvements, but which would not have occurred or would have been easily overcome by the intervention of a competent and independent authority. It is to be noted that although the example of success is clear and striking, it has not led, and it cannot be expected to lead to voluntary imitation in neighbouring towns.

The whole question of the progress of education in this country, and of the efficient and economical direction of the public grants in its aid, in my view, turn upon the extended application of the principle of local administrative consolidation.

At various public meetings of educated classes held on educational topics; at the educational conference held in 1857, under the auspices of His Royal Highness the Prince Consort, and also at the large public meetings of the Association for the Promotion of Social Science, held at Birmingham, at Liverpool, and lastly at Glasgow, objections to the principle of Governmental interference in the matter of public education were discountenanced. At the meeting at Bradford of the Association for the Promotion of Social Science, where those objections were brought in issue, they were rejected by a large majority. At the same meetings an increasing sense of the need of Governmental responsibility for extended action for the protection of the public was manifested. Adverse meetings have obtained only a very thin attendance and a very cold support.

On such occasions it is common for the opponents of the use of any central or Governmental agency to assume that proceedings with a view to obtain the use of such agency can only be on the principles of continental administrations. It may be proper to observe that our measures of so-called centralization have been deduced from our own independent experience and adapted to our own peculiar circumstances. I believe we may now, on the principles proposed, instead of following, take the lead in educational improvement.

But whatsoever may really be the tendencies of various sorts of central or Governmental action in foreign states,

to weaken or to impair local self-governments or local administrative authorities (of which less is known in England than is imagined), the proved effect of what we both deem sound legislative and administrative and constitutional principle is to strengthen them. It will be found to be the peculiar interest of a Government department conducted on sound principles, that local administrative authority, instead of being made and kept weak and dependent, should be constituted with as strong and self-acting a machinery as may be practicable, consistently with economy, and should be left and maintained in as complete independence of action as possible consistently with a due responsibility to the local as well as the general public. It was only under inferior social conditions and a low state of political information that our measure for the amendment of the administration of relief to the destitute could have been for years declaimed against as detrimental to local authority and to local responsibility; the fact being that it created local administrative authorities where nothing deserving the name previously existed, and gave to the poorest of the population a degree of protection and created an amount of responsibility to the ratepayers of which they were previously entirely destitute. If our measure had had its due and full consideration, that responsibility to the local as well as the general public would have been carried farther. As it is, under that newly created responsibility the poorest persons in the realm may have seen a noble duke, when acting as chairman of a board of guardians, brought to justify himself in his place in Parliament, and before the country, for alleged ill treatment of a female pauper; and they will have seen high officers put to their public defence for the first time against charges of maladministration affecting the destitute and dependent poor. In respect, however, to the education of their children, the middle classes, as well as of the independent wage classes, are the subject of every species of private and irresponsible adventurers, against whom there are scarcely any means of redress for the ill treatment or the ruin of children by *mala praxis*. A man of the wage class must, in the great majority of cases, avail himself of the school nearest to his place of work or to his residence, however bad it may be; and if there are several, he has too frequently only a choice of defects which he is usually unable to discriminate. Recent cases in courts of law have indeed displayed the fact that even professional

persons of high social position and education have no reliable means of testing the pretensions of expensive private preparatory schools; and when those fail, as the recent competitive and other examinations prove they do extensively fail, there are no means of reparation or prevention; for the parties, unless in cases of extreme outrage, have strong motives for concealing injuries to themselves, though the publication of them would be a warning to others. In the case of 234 young gentlemen, who, out of 437 examined for direct commissions in the Indian army, were plucked for failures in common arithmetic, and of 132 who failed in reading and spelling their mother tongue, what remedy had their parents for the heavy expenses fruitlessly incurred? What preventive warning have other parents against the continuance of the like expensive irreparable injuries to their children? Of the parents of young females of the middle class whose constitutions have been ruined by the frequent mismanagement in boarding schools, there are perhaps none who can do more than deplore the irreparable nature of the evil inflicted. The dogma which leaves to the private individual the duty of educating or providing for the education of his own children in a town, where he has to employ his whole time to gain the means of their livelihood as well as his own, is akin to the notion which should leave to him and every other inhabitant,—as a privilege,—the fetching himself the water for the use of his household, and carrying out of the town the waste water and the refuse of his household. Such doctrines, in their application to the father of a family of the wage class, are of the lowest political ignorance, or they are mockeries of his helpless condition; and, in effect, they are grossly wasteful of his labour, assuming that his best individual and independent labour were available to supply his wants therein. It is in the interest of every individual of the wage class particularly, that he should not be left dependent for the proper training of his children on the casual zeal or competency of his employer, or on the charity of private individuals, or on casual and irresponsible private speculation on his necessities. It is to his interest that he, and his employer with him, should have a real competent responsibility to look to in respect to adequate means of education created for him, and that the public service should be made use of to ensure the most efficient and responsible administration of all the local educational means,

private as well as public, in his behalf. As one means of ensuring responsibility, it should be established as a right of every parent to have his son examined, and his school attainments ascertained and certified by a public and responsible examiner, as a security that the school teacher has duly acquitted himself of his responsibility, an attestation which the well-trained school teacher would seek for the vindication of his own services. But the strength and value of such a responsibility will depend on the combined strength of the local administrative means with a division of educational employment for applying them, by gradations of competent service, as in such instances as that of the Faversham district school union.

The means of popular responsibility, as well as of efficient and really economical service, diminish with the size of administrative areas. For example, whatsoever may be the central educational power in France, or the school organization in its cities, to one practically acquainted with the principles of local as well as of general administration, it is only necessary to know that the unit of educational administration in France is the commune;—that the average population of the 36,000 communes is under 1,000;—that 44 per cent. of them have an average of only 306 inhabitants, and 31 per cent. of them less than 706;—that the average number of pupils inscribed on the lists of such schools as these are is under 60, and the expenditure on each school is on an average only 20*l.* per annum. He will be perfectly certain from those statistics that whatsoever may be the show of system and superior authority, or whatever may be the superior education in the larger towns, the elementary education of the greater proportion of the population must be of a wretchedly inferior description. Such, indeed, the public education in France was avowed to be in papers by French educationists read at the educational conference, and I venture to aver that it is incapable of any considerable extent of real progress under the existing communal arrangement.* In a work on

* In England and Wales the parish is not less fragmentary and useless, as an unit of local administration, for educational or other purposes. I expect it will be found by the last census, that the population of the smaller parishes has rather decreased than otherwise in favour of the larger town parishes; but when we had to deal with them for the purposes of Poor Law administration, we found that out of the 15,555 parishes, including in that name townships separately administered, there were 737 in which the population did not exceed 50

the education of the people by Mr. Willm, inspector of the academy of Strasbourg, he complains of the state of the primary education in France, and urges "that the action of the superior authority should be prompt and powerful" to retrieve it. But prompt and powerful upon what sort of functionaries! with what sort of capabilities? Upon an unpaid *maire*,—a poor half-educated peasant proprietor, who has the wants of himself and his family to occupy his thoughts, aided, it is true, by a *conseil*, which is no more than a vestry of a still lower educational character, having as its executive only a single wretched teacher, with a salary lower than that of a poor mechanic? It is our old story over again, of the proposed legislative action on elevated economical principles, for the reform of the administration of relief in rural districts, through the unpaid farmer overseers, a large proportion of whom could neither read nor write, yet who were expected to keep accounts and make returns, and on whom the law pretended to impose responsibilities for unintelligent and blundering action, "nonfeasance," or "misfeasance," or "malfeasance," yet who were virtually irresponsible for the most horrible cruelty, as well as wasteful malversation, towards the poor, such as can now no longer pass with impunity.* How respectable soever

persons; 1,907 in which it did not exceed 100; and 6,681 in which it did not exceed 300; and there were 5,353 containing no more than from 300 to 800 inhabitants. The great majority of parishes would be under 60 houses or families, and furnishing, if the pupils were all of one level in age and capacity, little more than a good class for a large school.

* Mr. Willm thus exemplifies the local action in France:—

"If, for instance, in any place there should be an ill-informed and not very zealous teacher,—not so bad that he could be turned away in terms of the law,—teaching in a confined, ill-aired, and gloomy room, in a school badly attended, wanting necessary materials, it is very possible that all the orders of the prefect, of the committees of the arrondissement, all the remonstrances of the inspectors, might be frustrated by the negligence of the mayor and municipal council. I know of a certain commune, with a school-house requiring extensive repairs; their urgency is acknowledged by everybody; the funds are ready. Well, for several years, thanks to the unwillingness of the mayor, to the negligence of the architect, and of I know not whom besides, the house still remains in the same condition, and is getting worse every year. In another commune the municipal council, four or five years since, voted the funds necessary to enlarge the school-house, which is too confined and badly situated, or to erect a new one, but the mayor does not agree with the council as to the plan and situation of the school, and nothing is done, notwithstanding the urgent entreaties of all the higher authorities" (p. 178). The last investigation of the state

may be the schools for the compulsory education given in Boston and the chief cities and towns of the northern states of America, I am quite confident, on administrative principle, that on the fragmentary township arrangement,—which appears to be analogous to that of the French commune and the English parish,—the educational provisions, and the education of the great bulk of the population out of the largest towns, must be coarse and inferior, as indeed a number of local reports which I have received prove it to be.* It must also be highly expensive, and the unpaid direction, tyrannically irresponsible; for it is yet to be taught as a first principle of administration that where there is no gradation of paid service and ensured constant attention, there is and can be no reliable responsibility. At a reduced charge in a district school union the people would have, through the

of public education in 1854 shows that in the department of the Creuse, of 1,903 married couples, 78 per cent. could not write. Among the women alone only 8 per cent. could write; in four other departments 70 per cent. could not write; in 14 departments the proportion of the ignorant was 60 per cent.; in 14 other departments it was about 60 per cent.; in 14 other departments about 50 per cent.; and in the rest 40 and 30 per cent. On the whole, scarcely half the French people possess the most necessary elementary school knowledge.

* The following is given in a New York school report as illustrative of the popular administrative conceptions in the rural districts as to the standard and value of the capacity for school teaching:—

“A. calls on one of the trustees. ‘Well, neighbour A.,’ says the trustee, ‘we have hired a man to keep our school this winter.’ ‘Oh! how much do you give him a month?’—‘Twelve dollars.’ ‘You must be a bright one to pay a man such high wages these hard times to keep a school; I’ve just hired a man to work for me this winter at chopping, threshing, and drawing logs, and I give him only eight dollars a month, and he is a real smart fellow, too. He can thresh 10 or 12 bushels of wheat in a day; and clean it up in the evening; and he’ll chop his four cords of wood day by day, and not wink at it; and I think it is a pity if we can’t employ a man to sit round the stove all day, and have 30 or 40 to wait on him, as cheap as I can hire one to do the work I have for a man to do; and I think it is a chance if he has much of a school.’ ‘I know,’ says the trustee, ‘it is too much, but no one else came along, so we thought we had better hire him.’ *Didn’t you try to beat him down any?*—‘I should think we did. We worked him from noon till nine o’clock at night, and got him down four dollars. He asked 16 at first.’ You should have beat him down four dollars more, and that would be more than a teacher ought to have.”

Our certificated school teachers already show better moral as well as intellectual results than those befitting such coarse conceptions as are displayed in the flashing of bowie knives, and fist fights, and “battles royal” on the floors of the highest legislative assemblies in America.

chief paid officer—the Principal—an amount of responsibility which is real and available.

I do not derogate from what has been gained for the cause of popular education by the institution of training colleges and of trained teachers, and the improvement of the quality of the education given, in which I must claim for the large Poor Law separate schools, and for the principle of the division of paid educational labour, or upon the half school-time and industrial and physical training system, on which they were designed and constituted, the foremost place for moral as well as intellectual and physical improvement, entitling them to be held up as models, though capable of further improvement.

But the subject is now presented for consideration, of the extent of the population actually brought and to be brought within the influence of these improvements.

We have frequently such declarations made as this:—The Rev. J. P. Norris, writing of the counties of Staffordshire, Shropshire, and Cheshire, says (Minutes for 1854, p. 553), that “out of every hundred children in that district, not more than six or seven were really profiting by the improved education introduced by their lordships’ measures;” those measures commonly occupying, on the common scale of instruction, five or six years of the children’s time, whilst under the principle of consolidation a better mental condition might be imparted in three.

Yet it is admitted, and almost proclaimed, that the present administrative machinery of the Privy Council, with only one-third of the work proposed to be done rudely commenced,—that is to say, with only about one-third of the schools which ought to be inspected brought under inspection, and with only partial improvements effected in the methods of teaching, is almost at a dead lock, and incapable of undertaking to do more. This dead lock is made manifest by the rejection of claims for extended public service, and the relegation of an educational subject, such as that of industrial schools, to another department. It would hence appear that it has yet to be publicly understood as a principle of superior or general, as well as of local administration,—the principle of aggregation for the purpose of segregation, for the classification of business and treatment of it by suitable division of combined administrative labour,—that the more you have to do, the better and more economically you can do every part of it.

It has also yet, it would seem, to be taught as an administrative principle, that local combination, classification, and division of administrative labour is necessary as a basis for the improvement of superior or central administration—for facilitating the labour of inspection and the whole service of the inspectors and of the superior supervision, increasing its efficiency, whilst reducing its proportionate expense for the service rendered to the public.

I have not seen the depths of popular ignorance duly sounded and marked, nor any reliable attempts made to estimate how much more there is yet to do. I believe that the proportion and progress of the numbers of the population who can only sign the marriage registers with marks fairly represents the proportions who are deprived of all that deserves the name of education. Those who have been a short time in dames' schools, or other inferior schools, are apt in shame to allege that they once could write, but from want of exercise they no longer know how. But this is commonly an unfounded excuse, and it may be confidently alleged that those who really have been taught properly never so far forget what they have been taught. The breadths and depths of popular ignorance, as so denoted, extend beyond the wage class. They extend to farmers and persons filling the office of overseer, and exercising political franchises so largely that political men of both the chief parties have objected to the adoption of a low educational test of reading and writing, or the power of reading and signing a registry or a voting paper in their own handwriting, as a qualification for the exercise of the franchise, and have so objected on account of the great extent of disfranchisement which it would occasion amongst their respective supporters.

The Rev. Mr. Mitchell, Her Majesty's school inspector, states, that adopting reading and writing as the test of the educational condition of the labouring population of the counties of Cambridge, Essex, Norfolk, and Suffolk, he found, upon tabulating results obtained for him by the colonels, adjutants, and the serjeant-majors of the militia, that out of 5,677 men, only 2,050 could pretend to read and write, that is to say, only about one-third. General Hay, and the officers of the training school at Hythe, give most important testimony of the advantages which education and intelligence confer in wielding the new weapons of war; and similar testimony is given by the teachers of the new naval gunnery. The Rev. Mr. Mitchell further

states, by way of contrast to the condition of popular education in this country, that he made inquiries in Prussia, and in Prussia Proper, Berlin, he found that of the soldiers, the amply educated were 94 per cent., five per cent. were defective, and one per cent. only without any education. In the least educated districts of Holland the uneducated form only 10 per cent. of the population.

I was requested to give aid in putting a body of about 2,000 men in the metropolis, omnibus drivers and conductors, and stable men, in a better condition, by insurance against the casualties of sickness and disability, occurring to themselves and their families. To obtain data from past experience, as to their ages, their previous sickness, it was requisite to obtain written answers from each; but so few were found to be able to write or to communicate the facts, that the attempt had to be abandoned. Yet these men were all in the receipt of good wages, and occupied eight or ten pound tenements. Upwards of 700 returns from unexamined and uncertificated *school teachers* to the Census Commissioners are signed with marks only.

Taking the extent of the actual ignorance of reading and writing as the best proximate test of the rate of the extension of popular education, what has it really been? We find it to have been, as far as the registration extends, steadily progressive certainly, but grievously slowly. In 1841 the proportion per cent. of those who could only make marks on the registries was of males 32·7 per cent., females 48·8 per cent.; the mean of the whole of England and Wales being 40·8 per cent. By the last return for 1857 it was of males 27·7 per cent., females 38·8 per cent.; the mean for the whole of England and Wales being 33·8 per cent. The mean rate of progress has therefore been seven per cent. in 16 years, or under a half per cent. per annum. From 1852 the progress has been a little less slow, but is still less than one per cent. per annum; and hence at the best speed yet attained, 33 years, a full generation, is presented as the period for the complete extension, under the present administrative system, of the lowest elements of education! In Lancashire the proportion was, in 1857, males 30 per cent., females 56 per cent. In the West Riding of Yorkshire the proportions were, males 27 per cent., females 50 per cent. Mr. James Hole, the hon. secretary of the Yorkshire Union of the Mechanics' Institutes, gives an account of the present positive state of the

working classes of Leeds in a prize essay, adjudged by the vicar of Leeds, as goes far to negative the effect of the representations made from that district as to the success of unaided voluntary effort. He shows that out of 1,946 marriages in the Leeds and Hunslet district in 1857, there were 478 men and 870 women who signed the marriage register with marks. Mr. Ingham Ikin, of Leeds, in *Medical Notes on the Militia*, states that of the 2,000 recruits first inspected at the commencement of 1854, there were 950 who could neither write nor read; and that of the recruits for regiments of the line inspected in 1857, 205 out of 300 could neither read nor write.

I find by some authorities this rate treated of as a natural and necessary rate of educational progression, from which full fruits are only to be anticipated by an after generation. From this conclusion I entirely dissent; and I aver that, with competent legislation and administration, far speedier results are obtainable.

The bill which I had the honour to prepare, which introduced the half school-time system in factories, contained, as I have already mentioned, clauses to empower the establishment of proper schools, and to give to the Government inspectors powers to ensure competent teachers for the half-time scholars. These clauses were passed through the House of Commons, but they were struck out in a Committee of the House of Lords, expressly on the ground, stated to me by their opponent, that if introduced they would lead to a national system of education, as doubtless, if duly administered, they might have done. About 10 years later, on the occurrence of strikes of uneducated workmen in Lancashire for wild and ignorant objects, which, if attained, must eventually be most injurious to themselves, I had occasion to point out to the Secretary of State for the Home Department that the great bulk of the prisoners apprehended for breaches of the peace, and who were the leaders of riots, were of the like average age as the mobs, that is to say, mere boys, whose average age was under 18,—the larger proportion of whom must have passed under the intended but rejected provisions, which experience proves would have prevented that gross and seriously dangerous misconduct which the penal law was invoked to punish. In 1834 our report, as Commissioners of Poor Law, set forth the experience of the impracticability of preserving orphan and destitute children from the demoralising influence of adult

paupers, if they were brought up under the same roof. The same report, pp. 306 to 312, (as had my own report of the previous year,) expressly stated, and cited evidence to show that classification in separate houses was essential for the proper education and training of pauper children. In the Act which passed, express powers were given for the purpose. In the face of the evidence of experience, training under the same roof with the adult paupers was resolved upon and adopted, with injurious results made early more manifest. At the present time the proportions of criminal children in reformatories throughout the kingdom are the same as those kept under the same roofs as the adult paupers in union houses, namely, about 60 per cent. Now if the provisions recommended in 1834 for the treatment of orphan children had had due execution, it admits of direct proof from the experience of the few classifications in separate houses and district schools made in accordance with them, where the failures on account of simple misconduct are reduced from two-thirds of the whole to below two per cent.,—that the great bulk of that criminal population now taxing anxious philanthropic exertions in the reformatories, and most of the younger orphans in the hulks and the convict establishments, would have been, like the children from well-managed district schools, in courses of honest self-supporting and productive industry.

This statement of the past may to many be distasteful; but I apprehend, that whilst it is due to us, its repetition is necessary for the future dealing with the immense evils of neglected education before us;—foremost of which must be put the greater proportion of the 100,000 annual commitments for crime,—the greater proportion of an army of upwards of 20,000 able-bodied persons, in detention in prisons for crime, continually recruited from an estimated four or five fold number, constantly at large, who are reared in habitual delinquency, the greater proportion of upwards of 2,000,000*l.* of money expended in a repressive penal administration, large masses of pauperism, and many thousand destitute orphan children at large, grievously unfitted for productive and honest industry, and prepared for juvenile mendicancy and delinquency,—literally providing 60 per cent. of the population of reformatories.

As against the large under-estimated mass of ignorance and crime there can be no efficient action except by a

strong local administration, having really for its minister and servant an efficient general supervision. That the local administration is in weak and disconnected fragments, and the present superior administration at a dead lock, as regards any increased rate of progress, may be proved by abundant evidence. I have already cited the testimony of Mr. E. C. Tufnell; all of which I may adduce as representative testimony, that the existence of the grosser moral evil and ignorance is no longer from the default of educational power, but lies with the legislative and administrative neglect of proved means for its proper application. Mr. Tufnell, with others of similar experience and observation, refutes the superficial pessimist opinion that the removal of these evils is essentially a work of generations:—

“And this conclusion,” (that hereditary pauperism and mendicancy may by educational means be extirpated) “you deem warranted by experience as applicable, by appropriate administrative means and organization, to the whole of the children of the poorer classes of the country?—Yes.

“Supposing the administrative machinery in action, within what period of time do you think such educational results as have been attained in particular instances may be attained generally, so as to affect the condition of the rising generation?—Ten years after such educational machinery was in action would, I have no doubt, show an extraordinary improvement in the moral condition of the country. I come to this conclusion in the following:—It is shown by criminal statistics that more than one-third of all the committals to prison, excluding debtors and military prisoners, are due to crimes committed by persons under the age of 21. Now, if schools were universal, we might reasonably hope to educate all who are at present 10 years of age; consequently in 10 years' time we should have affected all the population under 21 years of age; that is, supposing the results of education such as are sanctioned by experience, in 10 years' time we should have approached to the annihilation of one-third of the criminal population; and as another third of the crimes committed are attributable to persons between 20 and 30 years old, in 20 years we should, aided by such machinery as the question alludes to, have gone far towards preventing two-thirds of the crimes committed in this country, or perhaps more, as the number of criminals is much below the number of crimes, since one criminal generally commits far more than one crime.”

In my own view this is an under-estimate of the possible rate of change which may be achieved by administrative means.

As far as I can collect from the evidence, it appears to me to be clear, that the work which a properly constituted education department would have before it to do, would be to bring under instruction full one-third of the infantile population who receive no schooling whatsoever,—to recast the whole of the elementary instruction of the classes now in attendance,—to provide for improved middle-class elementary education,—to supply for all the omitted bodily training and conditions required by the laws of physiology, and to alter and adapt the mental training to the receiving capacity and the laws of psychology,—which laws are now generally and grossly violated.

Without raising any further question as to any past defaults of principle,—conceding for the present that the difficulties might hitherto have been insuperable of any other course than that taken at the outset of the present central supervision, it is important to have it clearly understood that the present dead lock of the Privy Council system, as against any further considerable advance, arises from the action of the department being based upon a fundamentally erroneous administrative principle.

I may illustrate this from the branch of administration which you well know, and with which the public has become the most familiar.

When the evils of the old Poor Law administration were displayed, we had to contend with a proposition for dealing with them parochially, by direct action upon 15,000 separate parishes or places in which the funds raised for the relief of the poor were independently administered. For this course of dealing directly with the separate parishes, a scheme, an establishment of supervising Government officers or auditors was, as you are aware, proposed, to cost 600,000*l.* per annum in salaries. As against this scheme, it was urged that, supposing such an official establishment were conceded, it would have to work upon an entirely unsound basis;—that is to say, upon fragmentitious areas of jurisdiction, inferior means of arrangement, inferior officers for the performance of any services, the great majority unpaid, unqualified, biassed by their interests, changing and irresponsible, and incapable of sustaining any important amount of additional responsibility,—the unpaid parish overseers. On such an organisation, in principle similar to that on which the education department has been, perhaps unavoidably, commenced

and hitherto proceeded, it must have fallen to the Central Board to have obviated by ample regulations, or to have retrieved as it might, the "malfeasance," or the "nonfeasance," or the misfeasance,—the endless blunders of illiterate former overseers or assistant overseers, which are now prevented by properly qualified union relieving officers or union clerks.

On such a basis, an expenditure beyond the 600,000*l.* per annum for the proposed Governmental agency for the local examinations and audits, even with subsidies in aid of the local rates, must have been productive only of inferior results.

But you agreed with me and with our colleagues, and we proceeded with an arrangement on another administrative principle, that of gathering together the subject matters of administration, and the local means of dealing with them into wider administrative areas. With a central establishment, costing, instead of 600,000*l.* per annum, some 30,000*l.*, acting directly upon 650 unions (which are yet more than 200 too many), instead of 15,000 separate parishes, and acting through an organized gradation of permanent paid officers, the administration was improved at every point, with an economy of 2,000,000*l.* per annum upon the expenditure of the unpaid overseers,—leaving, however, much to be yet accomplished,—as the proper training of orphan and destitute children in separate schools, and an improved medical relief,—leaving, on my estimate, a further reduction to the extent of upwards of 1,000,000 per annum to be effected by a further extension of the principle, and a more complete combination of the local administrative means.

Now the principle proposed for the improvement of Poor Law administration, of dealing separately and directly with the many thousand parishes, and which we rejected as erroneous, is the very principle adopted for the improvement of popular education by the Privy Council, and which proceeds without any manifest perception of the advantages to be obtained by a combination of the local means, or any other apparent object than to raise the popular education to one common low level. The consequence of the adoption of this principle, of working with the many instead of the few, has been described to me to be that the department is overwhelmed with correspondence. And whilst acting with an overweening centralisation, against which I individually protest, it may be proved to be ill-informed as to what

it does itself, as well as with the local elements with which it has to deal. On such a basis any additional expenditure must be productive of a very inferior effect.

On the present erroneous fragmentary parochial basis the number of the officers and the expenses of the central office must be largely augmented, as it is officially declared they must be, with any considerable extension of the services of the department. On the basis of local administrative unions, the expenses of the central department, if properly constituted and directed, would be diminished relatively to the increase of public service rendered, and to the increased amount of local expenditure brought under supervision.

The proper position and principles of action of a central authority are less those of an arbitrary authority than of a responsible servant, and especially of a servant to localities. They are, in my view, as I stated them in respect to another branch of public administration, that for the protection of the public health. The proper purposes of the central administration are:—

“First, as a responsible agency for the removal of those evils in the repression of which the public at large, as well as the locality, have an interest,” (but which, as in the old parochial system, the localities themselves were found quite unable to remove).

“Secondly, as an impartial authority for appeal in disputes between conflicting local interests.

“Thirdly, as a service for securing the due distribution of local charges for the protection of minorities and absentees against waste or undue charges.
And,

“Fourthly, as a means of communicating to each locality for its guidance the principles deduced from the experience of all other places from which information may be obtainable.”

At an assembly of eminent school teachers I received, I believe, an unanimous recognition of the peculiar applicability of these administrative principles to the advancement of public education. They objected to the notion of the eventual discontinuance of public grants, and the cessation of a central and responsible public agency for their supervision and direction. Such a notion could only be favoured officially by an impatience of the sort of labour which the application of those principles requires, or a consciousness of incompetency for its due performance. Such a notion implies that there are no public interests

in the upbringing of children extending beyond the narrowest localities;—that employers and parents may use up children as they like, and then cast the remainder as cripples upon others for eventual maintenance;—that the very poor and minorities shall have no appeal and no redress against the injustice of local majorities;—that educational administration and elementary education, instead of being in their infancy, are perfect, and universally understood in every the most remote district, and can derive no benefit from the observation of exterior experience, however wide, by observers, however competent and superior;—and that the art of local administration is perfect, whilst that of Governmental administration is in so hopelessly low a condition, that if there be anything required to be done which can only be effected by local or general combination, it had better be left to casual and irresponsible zeal and voluntary association, which must be of comparatively imperfect action at the best. Voluntary effort should, no doubt, on all accounts be cultivated, as it now is, and *cæteris paribus* preferred. In many respects it will be encouraged, as in despite of prognostications to the contrary it has been, to concurrent effort by the progress of public administration in rendering the application of educational means, private as well as public, of more certain effect. To testators of the character of the one of the Faversham bequest it must be highly encouraging to have assured to them the realization of the benefits of the character they may intend for the community. But with public means of prevention assured, it is not justifiable to expose multitudes to crime and misery for the sake of voluntary effort, on the chance of eventual relief, which is, after all, beyond its pale and power. Such a notion as the eventual discontinuance of public grants for education implies ignorance of the economies attainable on the several administrative principles specified, by services which, for the attainment of those economies, must be rendered for the public by some agency or other; and by what agency ought they to be, or can they be securely rendered but by the public's own paid agency, the Government? The allegation variously made that the educational department can do no more than it now does, may be taken as verifying the fact, that its present action is based on an erroneous administrative principle. The notion of the eventual exclusive reliance on voluntary

effort countenances a dogma, often promulgated for the promotion of sinister interests in private profits, made even by voluntary paid agencies—out of the public necessities, that Government does everything badly, as bad government—(such as sincere objectors in their ignorance of sound administrative principles appear only to know)—no doubt does. But to show that this is not an essential condition even of the present rudimentary administrative art, it may be asked, where have the measures of the highest proved practicability for improving the sanitary condition of the population,—where, on this same large topic of public elementary education, have the chief improvements in question,—the half-time principle,—the combination of physical with mental training, with great moral results,—the large reduction of the time and expense, by teaching on a large instead of a small scale, and by a division of educational labour,—where have these principles had their practical development, and for the most part their origin, but in Governmental departments? The allegation contained in the answer made by Mr. Tufnell, from the widest observation, to the following question, may be established, if it were necessary, by further testimony:—“Have any of the educational improvements you
“ have described been initiated by guardians or persons
“ who have not specially, or professionally, or officially
“ devoted themselves to the study of education?—Very
“ few, if any. The great educational progress in this
“ country has mainly originated in the efforts of those
“ persons who have used their official position, experience,
“ and influence to further these improvements, which have
“ subsequently been taken up by the Government.”

It is not, of course, pretended that this educational progress has been achieved simply because the action has been governmental, but because the position of those who achieved it allowed of wider opportunities of knowledge, and more constant and undivided attention than could be given by persons engaged in private pursuits. Will any one read what prisons were, and compare the progress made in prison discipline, when it was solely promoted by the Prison Discipline Society, with the progress it has in late times made under the influence of those whom I may call official Howards, acting authoritatively as prison inspectors?

A public administration on a correct basis, instead of checking private effort to improvement, would further and encourage it, by affording a competent and responsible

service, bound to adopt any approved principles from private suggestion, and carry them into practical operation; and would avail itself of the services of the private or outdoor devising head, where necessary, as it generally is, to overcome difficulties, and give the first impetus to an advance.* Of this the great measure of the penny post is an example.

At the meetings which I have attended of those school teachers zealously and seriously engaged in the work of

* The opinions of the majority of eminent publicists in France appear, from recent discussions at the Political Economy Club of Paris, to be in accord with those in England as to the expediency of mixed voluntary and governmental effort for the extension of education. "Tous," says M. Renouard of the Institute, "tous veulent que l'instruction se fortifie et se propage, tous souhaitent son universalité. Le mieux serait assurément que chacun se suffit à lui-même dans l'accomplissement de cette œuvre, c'est à dire, que chaque famille pourvut à l'instruction de ses membres. Nous sommes loin de cet heureux degré de civilisation, qui n'a été atteint en aucun temps, ni en aucun lieu, et l'ignorance couvre notre globe où la barbarie est en majorité. Pour subvenir à l'impuissance des familles et des secours individuels insuffisants, pour leur venir efficacement en aide, les pouvoirs politiques et religieux ont pris en main l'éducation, qui, grâce à eux, n'a point été délaissée, et ils ont empêché que l'ignorance ne régnât en souveraine. Ces pouvoirs secourables à mesure qu'ils ont mieux senti leurs forces, et la grandeur de l'influence que la distribution de l'éducation exerce sur la direction des sociétés, se sont plus en plus portés à convertir leur bienfait en instrument de domination. Le clergé et l'état n'ont pas résisté à la tentation de s'arroger le monopole, et se le sont vivement disputé. La liberté s'est fait jour à travers leurs querelles; elle a protestée, de moins en moins timidement, contre le monopole en faveur du droit individuel. La liberté se tromperait si en haine du monopole elle se donnait pour tâche de faire disparaître ou d'amoindrir les établissements créés ou soutenus par lui. Nous ne possédons rien de trop; et ce qui existe, ne répond qu'à un faible partie des besoins. La liberté a mieux à faire; elle doit, procédant par addition et non par suppression, conserver tout ce qui a été fondé, en l'accroissant et le vivifiant par la concurrence de fondations nouvelles. Notre passe, nos traditions, nos mœurs, nos lois ont couvert notre pays d'établissements d'éducation que le clergé et l'état y ont fondés. Il s'agit non de faire vide en demolissant ce qu'ils ont édifié, mais de bâtir librement à côté et en concurrence avec eux. Le concours de tout le monde n'est pas de trop." The existing education, imperfect as it is admitted to be, is pronounced to be an advance. "Si beaucoup se sont perdus," says M. Renouard, "par l'orgueil de la demi-science, chez beaucoup aussi les facultés intellectuelles se sont utilement éveillées et l'instinct moral s'est affermi. Raisonner mal, se diriger mal est un grand malheur; ne pas raisonner, flotter sans direction, végéter, se précipiter en bêtes brutes contre les obstacles de la vie, est un malheur individuel plus grand, une plaie sociale plus profonde." As to middle class education, it is denied that private or commercial enterprise suffices to provide for it. "En général," says M. Henri Baudrillart, "plus les besoins matériels existent, plus ils sont sentis;

education, they have expressed the need of a strictly responsible public agency for its advancement. They felt strongly and in particular the need of "an authority for appeal in disputes between conflicting local interests," and as a right for their protection and for the maintenance and advancement of the school teachers' profession. They prefer, for the examination and vindication of their own labour, competent official supervision to merely local supervision founded on casual attention and experience derived from a very narrow area.* They look forward with pleasure to

" on peut conséquemment les laisser faire, les industries destinées à les satisfaire ne manquent pas. En général, au contraire, plus les besoins de l'ordre moral existent, moins ils sont sentis; témoin l'ignorance, qui se sent d'autant moins qu'elle est plus grande, qui se montre d'autant plus indifférente à l'instruction, d'autant plus paresseuse à l'acquiescer, qu'elle est plus profonde." Speaking of commercial educational establishments, he says: "Croit-on qu'on puisse dans l'état présent des populations s'en fier exclusivement au goût qu'auraient les capitaux pour des établissements de cette nature? Les capitaux sont timides, pour qu'ils cessent de l'être, il leur faut l'appât de gros bénéfices. Quand la médiocrité du profit se joint à l'incertitude du résultat, il ne faut compter sur eux qu'avec réserve. Passons à l'instruction primaire. Ici le tableau paraît bien peu rassurant pour les défenseurs exclusifs de l'initiative individuelle, et les faits viennent tristement à l'appui de cette proposition, qu'il s'en faut que les besoins les plus profonds soient les mieux sentis. Qui ne sait la déplorable inertie des paysans? Qui ne connaît la répugnance, les préventions arrières de certains conseils municipaux contre l'instruction primaire? Qui aura un intérêt et un zèle suffisant pour porter l'instruction dans le sein des campagnes? Car encore faut-il offrir la source à ceux qui ne peuvent aller chercher, et la rapprocher de ces lèvres trop souvent peu altérées, en leur faisant comprendre l'avantage qu'elles ont à y boire. L'état est pleinement autorisé à le faire, puisque seul il est en mesure de combler cette grande lacune, puisque il y va d'un grand intérêt social autrement non satisfait, ou qui ne l'est que d'une manière très-imparfaite. L'état ne prend ici la place de personne, et il agit dans l'intérêt de tous, car l'ignorance est une menace pour la société comme une source de faiblesse; et pour celui qui la reçoit, l'instruction est, quoi qu'on en dise, le meilleur préservatif contre des tentations coupables, car elle est à la fois un ennoblissement de l'âme et un gagne-pain."

* The Rev. D. J. Stewart states (General Report for 1859) that the teachers have often to bear the injudicious (though well-meant) interference of those who think they ought to manage, but know not how, or else have to work under the dead weight of lukewarm supporters, prejudiced enough against the whole class to pounce on any error in judgment, and to withhold encouragement even when success is unquestionable. Many excellent persons do the greatest injury to their schools by not allowing to teachers that full responsibility and permission to carry out their own plans which are essential to their success. Under the mistaken notion that their own authority can be upheld only by the adoption of their own views of school management, they interfere where they ought rather to sympathise and support, and thus the teachers are discouraged, and their responsibility destroyed.

the visits and examinations, and to reports of leading superior Privy Council inspectors, as a means for the support and advancement of their art and service. The right of local officers to an appeal for a competent and impartial and public judicial investigation of charges involving removal is a provision of economy, for otherwise superior school teachers can only be got, or continue in the service, as against the bidding of the open professional labour market, at such additional rates of remuneration as shall compensate for their insecurity and exposure to unjust annoyance and dismissal from ignorant caprice and presumption. But for such security given in the district schools under the Poor Law Amendment Act, I believe that few of the first-class teachers would long remain, certainly not at their present salaries. Instances have been stated to me in evidence of men abandoning the superintendentships and good positions and salaries in the police of boroughs under town councils, and taking lower positions and lower salaries, with more strict discipline and supervision, in the police of counties, for the sake of freedom from inferior interference and tyrannous control, and greater security for fair service on a better footing.*

One means for the advancement of education would be by an improved competitive examination for the superior appointments, an examination less of the candidates personally, than of the results of their skill in previous teaching, which only competent examiners could conduct. On the other hand, the institution of an impartial authority, invested with the power and strictly charged with the duty of removing incompetent teachers, is a measure in the

* "The schools at St. Stephen's, established," says the Rev. Mr. Mitchell, "for four parishes, with a united population of 8,000, and no other Church schools, as I am given to understand, have now a master, salary 20*l.* ; mistress, salary 20*l.* ; infants' mistress, 20*l.* And there is also a prospective evil that no man of decent education will put himself in the position of a schoolmaster, dependent upon the mere whim or accident of the moment for a precarious salary. The principal supporter of a school dies, or leaves the parish. The influence which has given the funds a temporary impetus ceases. A reaction takes place. The funds no longer meet the expenses, and the teacher either accepts an inferior salary or drags too often a harassed existence from quarter to quarter, only at length to quit the school in disgust, and perhaps in debt. Unless means be devised to render the schoolmaster's appointment and salary permanent and fixed, depending only on his own character, there will be no inducing valuable men to take the situation, or retaining them if they have been induced by education and training to enter on the career."

interests of the local public, and important for the advancement of education. Parents and natural guardians should have a right of appeal for the removal of any teacher for cruelty, or misconduct, or for general incompetency, notwithstanding abettors in local authority which the unfit may have interest enough to secure, as is notoriously extensively the case to the ruin of many foundation schools.*

I cite in illustration of this position the statement of Mr. Tufnell, that from opportunities which he has had of judging, he has "the lowest opinion of the instruction given in private schools for the middle or even of the upper classes. As a proof of this I may mention that it has frequently occurred to me to cause the dismissal of a master from a pauper school on account of gross ignorance or gross immorality. The useful power of the Poor Law Board prevents such people being again appointed to pauper schools, but I have taken pains to ascertain what has become of these masters, and I have generally found that they have got places as ushers in schools for the middle or upper classes."

On each of the other topics of administrative principle which I have specified, the public needs for the advancement of education are large, and the powers and means of the Education Department for supplying them on its present footing are small, and it is a matter of common complaint that they are imperfectly applied. The correspondence can only be made properly manageable by a reduction of the number of its direct sources, and in some cases by personal intervention, as in Poor Law administration the reduction of the sources of direct correspondence from the thousands of parishes to the hundreds of unions, and thence, in a large proportion of cases, through assistant commissioners. In many cases a central authority cannot tell with whom it deals, and is put into a dubious position merely by the sight of a paper, and it must see through the eyes of an assistant. By personal explanations misconceptions on both sides are prevented, and corre-

* "One has heard," says the Rev. John Day Collis, in a paper on the Foundation Schools of England, "of a school where the master's salary was 600*l.* a year, and his object was to drive away the pupils. This he effected by a series of severe floggings; various periods, from a fortnight to six months, being requisite to insure the withdrawal of the unfortunate scholar, according to the thickness of his skin or the obstinacy of his parent. The 600*l.* soon became a very comfortable sinecure."

spondence shortened. But in consequence of the multitude of the separate places to be visited and examined, the inspector's functions are lowered from those of administrative organization, instruction, and negotiation for improved arrangements, to those of examining schools as they are, often hastily and perfunctorily;—services which might to a great extent be performed by assistants chosen from the higher class of experienced school-teachers. So much of the time of the inspectors appears to be occupied with this sole work of imperfect school examination as to leave them little or none for other important services.

As a consequence, it appears to be necessary in the present state of things to dispense with much local visitation and personal communication for the purpose of school examination, and leave the business to be done, as it may, wholly by correspondence. As might be expected, the office correspondence is complained of as being prolix and unsatisfactory. I have been assured that in one important district, where the ignorance test, the proportion of marksmen and of crime, is very high, and the needs of education great, parties forego the aid intended by Parliament rather than encounter the great trouble and complexity of correspondence incurred under the present arrangement of the department. Affairs which a competent inspector on the spot, seeing the parties, giving personal explanations, and saving applications in writing, would arrange satisfactorily in days, are now transacted unsatisfactorily in weeks and months, and much in the dark, by correspondence.

One very serious instance of defect is the practice of dealing mainly by correspondence, with the important subject of the sites of new schools as well as with their construction, as also with the adaptations of old schools, in respect to which it would be of the greatest importance that promoters (and local architects also) should have the benefit of the personal inspection and the independent advice of an architect competently conversant with sanitary science, of successful practice in ventilation and drainage, and the specialities of school construction, furnishing, and expenditure. The most consummately conducted and laborious and interminable correspondence fails in such cases as a substitute for personal inspection and communication on one side or the other.

And I would ask, what must be the difference of the correspondence between the central board and one such

union as the Faversham district union and its board or Principal, as compared with that between each of the 11 separate and independent parishes (which the union now comprehends) and the central board? But it is only by going to the dame and separate parish schools, and then going and seeing the principal of the union, or the principals and head masters of equivalent large establishments, such as those of the chief district schools, that it is possible to appreciate fully the difference in the treatment of the subject matters, the improvement in the quality of the correspondence as well as the reduction of its quantity, and the elevation of the character of the superior central service obtainable by improved local organizations. By such local organizations general public support is obtained, whilst from the unskilled and irresponsible parochial officers no amount of labour in the central board obtains other than partial and unsatisfactory results.

In illustration of what I mean by an overweening centralization, I might refer to a pretension of the department, announced at its commencement, to have under its direct view the course of every pupil in every supervised school throughout the kingdom. Such knowledge might be got, as the Poor Law Board might have got in the central office a registration of the character and course of every pauper relieved; but what direct action, exceeding that of a competent local administration, could the Central Board have taken upon such cases, unless at an enormous expense? Such a pretension implied the centralisation of an immense mass of details, and a power of dealing with them directly by particular orders which was then visionary. Wide local administrative areas, for which I have contended, are to be striven for, to be rid of the centralisation of details. By large and sound classifications you lay the foundation of commensurate general rules or principles for dealing with particulars by the local authorities, to whom they may be left, with the clearer perception which the classification will give them for dealing with them or applying modifications. The better the classification, the fewer the exceptional or extraordinary cases calling for intervention, and the more complete the reduction of the labour of the central service to supervision and action exclusively on general principles. This has yet to be generally taught as a principle.

On the fourth topic which I have stated, of superior responsible service and duty, *i.e.*—that of communicating to

each local authority for its guidance the facts or principles deduced from the experience of all other places from which information may be obtainable, I have met with a general feeling of dissatisfaction amongst the head school teachers, that whilst important experiments and experience in the art of teaching were known to be in progress elsewhere, the tendency of the present practice of the department of Privy Council was to maintain the old system, and make the four walls of the school the boundaries of their information. You, who have joined in some measures by which the spirit of a principle enunciated by your friend Mons. Guizot was anticipated, will judge of the large default which requires reparation in England. In speaking, in his Memoirs, of his measures when he was minister of Public Instruction in France, he observes, that "the best laws avail but little if the hearts of the parties charged with their execution are not interested in the mission confided to them, and if they do not support it with a certain amount of enthusiasm and faith." In this view, he states that he proposed and carried a measure for the gratuitous circulation of 30,000 educational manuals to the different teachers throughout France, and in congratulating himself on the results, he states: "This experiment joined to others has taught me that when we wish to act with more than ordinary power on men, we ought not to be afraid of pointing out to them an object, or of addressing them in a language above their situation and habits; neither should we feel discouraged if many among them fail to respond to these unaccustomed invitations. They attract a far greater number of minds than they repulse; and we may still believe in the virtue of the seed even before the fruits appear." The testimony of the head masters of the district schools, herewith submitted, will give you pleasure, as showing what character of minds are now engaged in the more economical pauper training, and are capable of contributing suggestions deserving of circulation. "Des rapports précieux, pleins de faits et des vues rédigés par les comités, les inspecteurs, les recteurs," and others, he says, as we may say, "demeurent inconnues du public. Le Gouvernement doit prendre soin de connaître et de répandre tous les méthodes heureuses, de suivre tous les essais, de provoquer tous les perfectionnements. Dans nos mœurs, dans nos institutions, un seul moyen offre assez d'action, assez

“ de puissance pour assurer cette influence salutaire ;
“ c’est la presse.” The circulation of 20,000 copies of instructional reports, previously to the passing of the Poor Law Amendment Act, and of 8,000 copies of the earlier annual report, instead of being extravagant outlays, as ignorantly surmised, were means to effect large economies of result. But in my experience, the annual intervals for the issue of information are too wide, and I proposed and prepared an issue of information more frequently, in weeks and months, by an official circular to all boards of guardians whenever there was enough of information to fill one, which was usually once a month. The sale of this official circular yielded a profit to the department. The school teachers throughout the country will attest the importance of this precedent for them ; but they have been of late deprived even of that very imperfect document, the annual report, of which the inspectors too justly complain. It is, moreover, matter of complaint that even the inspectors are not duly informed of the correspondence which takes place in relation to affairs within their own districts. Nay, it is notorious amongst educationists acquainted with the subject, that the political chiefs are largely uninformed as to important elementary conditions within the field of service for which they are in theory responsible.

It would be difficult to estimate the extent of the waste of labour and of money which would be prevented, and of the progress which would be obtained, in the proper guidance of professional as well as of public opinion, by the right understanding and thorough application to education of the administrative principle which I have enunciated as to the duty of collecting and diffusing authentic information for local guidance. The efficiency of the service under this principle will be as the extent of the field of administration, and thence of the varied experience and information obtainable therefrom.

In that state of fragmentary isolation, whether of sect or of district, which fanaticism or sinister interest praises under the name of independence, success yields no example for imitation, failure no warning for avoidance. In illustration of the default of administrative principle, I cite the following passages from a paper sent to me by the late Hon. Horace Mann, of Massachusetts, an educationist of extensive observation and repute, with whom I corresponded.

“ In the first place ” he says, speaking in New England, “ the

best methods should be well ascertained; in the second, they should be universally diffused. In this commonwealth there are about 3,000 public schools, in all of which the rudiments of knowledge are taught. These schools at the same time are so many distinct, independent communities, each being governed by its own habits, traditions, and local customs. There is no common superintending power over them; there is no bond of brotherhood or family between them. They are strangers and aliens to each other. The teachers are, as it were, imbedded, each in his own school district; and they are yet to be excavated and brought together, and to be established each as a polished pillar of a holy temple. As the system is now administered, if any improvement in principles or modes of teaching is discovered by talent or accident in one school, instead of being published to the world, it dies with the discoverer. No means for multiplying new truths or even for preserving old ones. A gentleman filling one of the highest civil offices in this commonwealth, a resident in one of the oldest counties and in one of the largest towns in the State, a sincere friend of the cause of education, recently put into my hands a printed report drawn up by a clergyman of high repute, which described, as was supposed, an important improvement in relation to our common schools, and earnestly enjoined its general adoption, when it happened to be within my knowledge, that the supposed new discovery had been in successful operation for 16 years in a town but little more than 16 miles distant. Now in other things we act otherwise. If a manufacturer discovers a new combination of wheels, or a new mode of applying water or steam power, by which stock can be economised, or the value of fabrics enhanced 10 per cent., the information flies over the country at once; the old machinery is discarded, the new is substituted. Nay, it is difficult for an inventor to preserve the secret of his invention until he can secure it by letters patent. Our mechanics seem to possess a sort of keen greyhound faculty by which they can scent an improvement afar off. They will sometimes go in disguise to the inventor and offer themselves as workmen, and instances have been known of their breaking into his workshop by night and purloining the invention, and hence that progress in the mechanic arts. Improvements in useful and often useless arts command solid prices, 20, 50, or even 100,000 dollars; while improvements in education, in the means of obtaining new guarantee for the permanence of all we hold dear, and for making our children and children's children wiser and happier, these are scarcely topics of conversation or inquiry. Do we not need then some new and living institution, some animate organization, which shall at least embody and diffuse all that is now known on this subject, and thereby save every year hundreds of children from being sacrificed to experiments which have been a hundred times exploded."

To some extent the following might be taken as displaying the grounds of complaint made to me by able

teachers of the private jobbing in the promulgation of school books in this country :—

“ A great mischief is suffered in the diversity and multiplicity of our school books. Not more than 20 or 30 different kinds of books, exclusive of a school library, are needed in our common schools, and yet, though I should not dare to state the fact, if I had not personally sought out the information from most authentic sources, there are now in actual use in the schools of this State more than 300 different kinds of books; and in the markets of this and the neighbouring States, seeking for our adoption, I know not how many hundreds more. The standards in spelling, pronunciation, and writing, in rules of grammar, and in processes in arithmetic, are as various as the books. Correct language in one place is provincialism in another. While we agree in regarding the confusion of Babel as a judgment, we unite in confounding it more, as though it were a blessing. But is not uniformity on these subjects desirable? Are there not some of these books, to which all good judges on comparison would award the preference? Could they not be afforded much cheaper for the great market which uniformity would open, thus furnishing better books at lower prices? And why not teach children aright the first time? It is much harder to unlearn than to learn. Why go through three processes instead of one, by first learning, then unlearning, and then learning again? This mischief grew out of the immense profits formerly realized from the manufacture of school books. There seems never to have been any difficulty in procuring means of recommendations, because patrons have acted under no responsibility. An edition once published must be sold; for the date has become almost as important in school books as in almanacs. All manner of devices are daily used to displace the old books, and to foist in new ones. The compiler has a cousin in the town of A., who will decry the old and recommend the new; or a literary gentleman, in the city of B., has just published some book on a different subject, and is willing to exchange recommendations even; or the author has a mechanical friend in a neighbouring town, who has just patented some new tool, and who will recommend the author's book if the author will recommend his tool. Publishers often employ agents to hawk their books about the country; I have known several instances where such pedlar, or picaroon, has taken all the old books of a whole class in a school in exchange for his new ones, book for book, looking of course to his chances of making sales, after the book had been established in the school, for reimbursements and profits, so that at last the children have to pay for what they supposed was given them. On this subject, too, cannot the mature views of competent and disinterested men, residing respectively in all parts of the State, be the means of effecting a much needed reform.”

In pursuance of representations of the tenor of the above by the late Mr. Mann, who I knew was impressed with the principles of our amended Poor Law administration

in England, a Central Board of Education was established in Massachusetts, with good, though very partial effects, such as might be expected from the fragmentary and low state of the local administrative arrangements. I am glad to learn, however, from recent correspondence, that public discussion has been opened in America on the principle of our half-time schools, and of the combination of physical with mental training.

For the performance of the functions indicated as part of the proper duties of a central responsible agency for the local as well as the general public,—functions which should include the sanction of educational books,—it would not be requisite that the department should exclude independent effort, or have a monopoly of supply, or do more than to give careful attention and responsible testimony as to the extent of the trials made and the results of the methods or works promulgated. To the extent to which the National Board of Education, when acting under the auspices of the Archbishop of Dublin, has performed the duty of preparing or authenticating good school books, it is admitted to have rendered great service beyond its own jurisdiction to the cause of education in Britain, where I believe those books, by voluntary adoption, have as large a circulation as in Ireland. In like manner the expository papers on sanitary questions, which we issued from the General Board of Health, were adopted, translated, and circulated voluntarily for professional information in France and Germany, as were some of the expositions of points of principle in respect to the regulation of the labour of young persons in factories, which fell through in England by the influence of sinister interests, but gained consideration and adoption in Germany.

As we have in this country a paid agency for general service, I cite, in illustration of the default in its action, the following complaint made by Mr. Keenan, the chief of inspection of the National Board of Education in Ireland, in his report for 1856, that “it is anything but
“ creditable to the educationists of the British empire that
“ so few manuals of school-keeping are to be found in the
“ London catalogue. France and Germany are colonising
“ the world with their treatises upon education, their
“ theories, and their practical school notions. England,
“ Ireland, and Scotland, with ample materials for experi-
“ ment and observation, are almost silent; school events
“ are scarcely chronicled, educational theories are seldom

“discussed, originality of conception or design is un-
“attempted.” But the right application of the adminis-
trative principle, and the due performance of such service
as that in question by a superior office, implies the ex-
istence of an organization within it for keeping itself up
to the highest state of information in the whole field, and
for the direction of action upon it. That it may inform
and guide others to the best known methods of school
teaching, it is requisite that the department should itself
be highly conversant with them.

Now it was a subject of complaint at the recent annual
meeting of the United Association of Schoolmasters of
Great Britain, at which I was called upon to preside, that
the education department of the Privy Council is itself
uninformed or misinformed on primary and essential
principles and conditions requisite for the most effi-
cient and economical school teaching; in fact, that it
is uninformed as to the principles practically displayed
in the Faversham case, and expounded in such testi-
mony as that of Mr. Thos. Crampton, of Brentford,
and that of Mr. Allen, and other experienced school
teachers, which I have submitted herewith. It is due to
solicit attention to the ground of complaint put forward
in the Minute of the Privy Council limiting the number
of pupil-teachers in each school, and thence the scale of
teaching. By this Minute (art. 5 of Minutes passed 4th
May 1859,) it is determined “in no school to allow pupil-
“teachers to be hereafter apprenticed at the expense of
“the Parliamentary fund in a greater proportion than one
“pupil-teacher for every 40 scholars in average attendance
“during the year preceding the date of inspection, nor in
“a greater proportion than four pupil-teachers to the
“same master or mistress.” If it be conceded to be
expedient to reduce the number of pupil-teachers, it is a
prevalent feeling that it was surely not necessary to do so
by going against what the leading school teachers feel to
be the great practical principle of educational progress
in efficiency and economy,—the educational division of
labour; for this Minute tends practically to limit the scale
of teaching to schools having only about 160 pupils. It
is complained that the permission to take one assistant
teacher in the place of two pupil-teachers does not amend
the default of principle. It is felt that the inspectors
could not have been consulted on this measure, nor, indeed,
their reports, which shows that all progress in teaching is

in the direction of extended classification. In the central district school of London I found, besides three assistant masters, 18 pupil-teachers; and it was declared that the teaching would have been all the better, as I have no doubt it would, as also more economical, if 400 or 600 more children had been brought into the establishment, and a proportionate augmentation made of the number of pupil-teachers. As showing the sort of information in the face of which apparently the measure in question has been adopted, and also as serving further to illustrate the master principle of economy and efficiency against which it militates, I submit to particular attention the following questions put to Mr. Tufnell, and his answers on the principle of administrative consolidation:—

“If the numbers of each of the chief district schools, containing from 500 to 800 children each, were increased, would the average generally give the means of increased efficiency?—Yes it would.”

“If the existing numbers were reduced, would the general effect of the reduction be to reduce the efficiency of the school tuition?—Most certainly.

“Is not the principle of the great efficiency of the large school staff and the division of more systematised labour at the same or a more reduced expense, a principle of economy which will necessitate large aggregations for public teaching wherever they can be obtained, and place small or private schools at an increasing disadvantage?—Yes; and I may add, as respects the district pauper schools, that we have not yet found a limit of numbers beyond which it is disadvantageous to go, larger schools being invariably the most advanced, and the largest the best of all.”

Another of the inspectors, Mr. Bowstead, in his general report for 1859, on the progress of the British and other Protestant schools, concludes an exposition of the inferiority of the great majority of the small schools in discipline, attainment, and general results as compared with the large schools, by stating,—“It is a fact, confirmed by all my experience as an inspector, that schools containing from 200 to 400 or more children, as managed under the Minutes of 1846, are far superior on the average to schools ranging between 50 and 150. They are also much cheaper, that is, the cost of educating each child is less both to the managers and the public.”

Mr. Watkins' report on the schools of his district of

York, Durham, and Northumberland shows, as to the expense at a school for—

“ 200 boys the cost per head would be	£1 6 2
300 ” ”	1 3 2
400 ” ”	1 2 0½
Whilst for 50 it would be	2 8 4”

The measure in question is therefore retrograde, tending to augment (as shown, as to the cost of secession in the Faversham case,) the time as well as the expense and efficiency of tuition, and it is taken as displaying ignorance of the principles which tend to the most economical and efficient direction of the public monies to educational purposes. It is believed, moreover, that it will be found that the public have no adequate security from the department, as at present constituted, that the grants are beneficially applied for the purposes intended, that it has truly no means of ascertaining whether every child is taught well or ill, or whether it can write as well as read, or has really been properly educated, a result which, I am confident might be, and under practicable administrative arrangement and general regulations ought to be, ensured to every parent, as well as to the public at large, by an authentic certificate as an individual and family document. At the same time, under the existing erroneous administrative principle of dealing singly and separately with the parishes, the mass of correspondence direct to the department, from upwards of 6,000 unpaid, feeble, varying, and really almost entirely irresponsible local authorities and administrators, must be so great as to obscure information, and leave little time for other than routine duties, and must exclude the due consideration and mature preparation of legislative or comprehensive measures of progressive administrative improvement by those alone from whom they can reasonably be expected,—the permanent paid officers.

No doubt the official correspondence might be much reduced, and the efficiency of the service of superintendence greatly augmented, if the principle were adopted of paying for results, for which the important progress made in the art of testing the acquirements of pupils by examination furnishes safe means.* In Poor Law administration, I proposed to extend the interest and responsibility for results beyond the school, by providing that the school teachers should be paid by very small

* *Vide*, as to this progress, Mr. Tufnell's evidence, p. 191.

salaries; but that their emoluments should be increased by large and liberal allowances on the number of children who were got into productive employment, and who kept it. Such a principle, effecting the administrative alliance of interest with duty as a means of economy was beyond the common conception. The reports of its working in particular instances where it was adopted were most satisfactory. The teachers were found to extend their observation and attentions to points previously overlooked beyond the school-room, and to pay particular attention to their pupils' manners and behaviour, and as of consequence to ensure success in life. Mr. Tremeneere's prize scheme I consider as partaking of the same principle, and as being, in fact, a mode of paying for immediate technical results. I have no doubt that, whether principle were superinduced on the present practice or any other, it would greatly further the progress of education, but most, and to an extent beyond anything anticipated, when combined with the enlarged means derivable from a system of local consolidation.

Besides the waste of superior administrative power occasioned by an official procedure on a false principle, there is a great waste of such power by the separation of educational functions and services, and a weakening of forces, which, though it has occurred accidentally, ought now to be prevented. If the public service were duly considered, we should charge the chief duty upon the department or officers to whose speciality the chief portion of the service or duty required belongs. Thus, in the administration of relief to the destitute, the chief service required in respect to orphans and children of the destitute is to give them such a training and education as will convert them into independent and self-supporting labourers. At the time we prepared our scheme of amended Poor Law administration, there was no department of public education, no responsible public officers as school inspectors, or we should, of course, have done what ought to be done now,—namely, have charged upon the special education department the duty of framing and issuing orders for the regulation of the education and training of the children of the destitute,—for ensuring the proper qualification of teachers, for the dismissal of the unfit,—for the determination of the numbers to be taught together,—and also have charged upon the education inspectors the duty of seeing that those orders were duly

executed, leaving to the general Poor Law Board the duty of regulating the chargeability of the destitute, the raising and expenditure of rates, the housing, clothing, feeding, the subjects of relief, and the other administrative duties which are not educational.

The chief services required under the Factory Act are the protection of children from bodily injury by overwork, and from mental injury by exclusion from education; that is to say, the services required are, in a comprehensive sense, chiefly educational; with some collateral sanitary duties and protection against accidents, such as are required in respect to schools. At the time I was charged with the preparation of the original Factory Bill, the idea that it was the duty of the State to do more than tax and punish, and that it ought to prevent the sacrifice of the poorest of the population to ignorance, indolence, vice, and crime, had not taken root, and there was no department of education, there were no school inspectors, no training colleges, no trained teachers; or I for one should never have thought of applying to the children who were in need of elevation an inferior educational service of inspection, nor should I have thought of weakening the superior educational power by creating a separate and independent subdivision of educational labour. Clearly the duties of educational inspection, and the superintendence of the duties of the inspectors, ought to be transferred from the department of penal administration, where the superintendence of the chief is really illusory, vexatious to the inspectors, and almost a fraud on the public, to an adequately constituted education department. The powers of local consolidation which are proposed as requisite for the due administration of the existing administrative means are peculiarly requisite for providing, without increased expense, suitable educational accommodation for those half-time children who are now under the Factory Act, and for ensuring the attainment of the objects of the law in respect to them.

Assuming that the principle of a compulsory education under the Factory Act is now established to the general satisfaction of the chief manufacturers, its former opponents, and to that of the operatives, who declare that the half-time system "is one of the greatest blessings conferred " on the manufacturing districts in our time," the chief objects are now to improve its working, and to extend its application, and render it as nearly as practicable uniform.

If the House of Commons (or the public for it) could be got to consider candidly the sinister interests to which the application of the Act to other employments is exposed, the power given to minorities to obstruct and frustrate the most important measures for the public benefit, in thin houses and late at night,—if it will regard the occupation of its own time and the delay of relief in fighting for the extension of the principle, trade by trade, and the gross anomalies in detail, and indeed in principle, already created thereby, if the House be not up to the general application of a principle, though of proved success,—if it will have it extended piecemeal,—surely it might allow the benefit to be extended gradually, and, upon special local examinations and report, by Order in Council. The extension might be made by the same procedure as that I have described for the formation of district school unions, upon a local application, and a local examination and report, against any portion of which the parties would have an appeal and hearing on the spot, far more satisfactory to themselves than amidst the business and scramble of the House of Commons and would have, moreover, a really responsible judicial decision.

At a meeting of the Law Amendment Society, at which Lord Brougham presided, where the question of the better application of charitable trusts was discussed, and at a special committee, to which the proposal of Vice-Chancellor Sir William Page Wood, to transfer the jurisdiction in relation to those trusts from the Court of Chancery to the Charity Commissioners, was referred, I proposed, in relation to the educational charities, and those applicable to education, that they should be transferred to a Judicial Committee, or to the Education Committee of the Privy Council empowered to hear and determine judicially. I argued, as respects the jurisdiction of the Court of Chancery, that as to the greater proportion of the educational charities, the relief, to be effectual, must be given gratis, by a body competent to give, instead of requiring to receive expensive instruction, as to their direction. In proportion as the art of education, like other arts, has advanced, it is advanced beyond the means of persons who are (technically) uninformed, and therefore incompetent to deal with its practical applications both efficiently, economically, and safely. Where there has been no improvement in a locality, those

who are dissatisfied with the administration of a foundation, but whose experience and observation are bounded by the locality, are generally incompetent to suggest schemes of themselves, (as the majority of those presented will show,) whilst the Court of Chancery or its officers are about as competent to judge of good or bad teaching, or of any combination of the new educational power, as it would be to decide on the application of steam power. To get up the technical information now gained on education, to enable it to form a safe judgment, would, as I believe you, as an old Master of Chancery, would agree with me, require a degree of professional labour and expense similar to that which is requisite to inform a court on patented inventions, and which, after all, it is complained, so far fails, that it is declared that it will be necessary, to satisfy the parties in such cases, to constitute a court specially prepared to deal with them. To inform a court on the economical and legislative principles necessary for its safe guidance in laying down rules for the administration of relief to the poor, or for their education, would require the perusal of the evidence, and the deductions from it contained in volumes of official reports,—which labour being impracticable, the course of judicial legislation and administration on those topics is admitted to be erroneous by all who have specially studied them. No doubt the jurisdiction proposed by Sir William Page Wood would be preferable to the present state of things, and in cases requiring the investigation of legal rights it might still be eligible, but in cases where the object was, mainly, to effect improved educational schemes, the service would be better rendered by a Committee of Privy Council, competent to exercise a real, economical, and local visitorial power, through competent officers, its inspectors, who are charged specially with the promotion of education.

In this view I believe I had the general concurrence of the special committee of the Law Amendment Society, to whom the subject was referred.

I have brought the Faversham case under the consideration of Mr. Hare, of the Charity Commission, and I am glad to have the support of his opinion in the answers to the following questions which I put to him upon it:—

“Do you think the method of administration in the Faversham case could be usefully followed in dealing with charitable endowments for the benefit of the poor in other parts of the kingdom?—The Faversham case has not come under my own observation; but

as you describe it, it appears a most valuable example of what might be done elsewhere. There are vast numbers of localities in which the same principles applied in the administration of charity funds would be of incalculable benefit. A few days ago I investigated the condition of a school at Appleby, in Leicestershire, where the trustees are anxious to extend its utility, and are met with great local opposition. Within a few miles of that spot there are schools having together an income nearly 4,000*l.* a year, applicable expressly to education, now effecting next to nothing compared with what they might accomplish, and several of them, in fact, positively obstructive to the general means of education. The good fortune of Faversham placed Mr. Wreight's bequest in the hands of enlightened trustees, and the inhabitants were not less fortunate, I should think, in the manner in which the cause was brought on. I do not know by what judge it was heard, but I have never met with a scheme departing so widely and so boldly from the narrow precedents which usually govern such cases.

“How do you think the legal and technical as well as the administrative difficulties could be most readily overcome?—First, by making such cases as Faversham extensively known, that the good of such a system may be appreciated; next, by combining as far as possible charities for a town or district under the management of local trustees, composed of the most enlightened of the inhabitants, and conferring upon them large powers. Centralization is avoided by giving the best and most effectual form of constitution to local bodies. In the union for educational purposes of the school and other trusts, the schemes may be first prepared by the joint action of the inspector of schools and the inspector of charities, the one addressing himself to the legal and financial business, the other to the educational arrangements; and this scheme may then be revised and settled by the Committee of Council for Education and the Charity Commissioners; and having received the approval of both, it may then be binding, subject only (as I think you have suggested) to the Judicial Committee of the Privy Council. There is such utter inconsistency in what is called the *cy-pres* doctrine, as to afford sufficient ground for a declaratory Act, that it shall be lawful, with the consent of the majority of the trustees and administrators of charities for the poor, ‘to apply them in the promotion of the education of the poor ‘or otherwise, in such a manner as shall tend to prevent rather ‘than to perpetuate poverty.’ This would establish an intelligible principle with which the Judicial Committee could deal. With such a declaratory Act, the appeal might even be left to the Court of Chancery.”

As a sound physical training is proved to be a necessary basis for a sound mental training, as the present practice of long hours of sedentary school constraint in the best constructed schools is, on medical testimony, proved to be a wide cause of enervation and predisposition

to disease, and as the common schools are direct sources of the epidemics which occasion or largely aggravate the excessive slaughter of upwards of 59,000 children in England and Wales within the school stages, and as other evils are proved to be entailed by the insanitary school conditions in after-life, I submit that special provision is due against them, even if it were simply as a means of promoting book education, for the testimony I have collected shows that between schools in the ordinary condition not commonly deemed objectionable, and schools in an improved condition in respect to ventilation and lighting, there is a difference of at least one-fifth in the power of book instruction; that is to say, in the efficiency of the application of several millions of public and private expenditure. Inasmuch as after years of incessant representation, and amongst others, most powerfully by the Health of Towns Commission, of which his Grace the Chairman was a member, legislative recognition has at last been gained to the principle that a people's health, as a source of a people's strength, is a proper subject of regard by a constitutional Government; and as some public officers have been appointed in accordance with that recognition, though miserably few, and with functions impaired by reactionary movements, in the like spirit to that in which the securities for the competent teaching of the factory half-time children were rejected; I venture to submit that the services of these new officers, of the medical officer of the Privy Council, and the sanitary officers engaged in connexion with the local government office and other departments, might be as beneficially directed in this branch as any other of the public service to aid for a time local reorganizations. These officers have, I know, much of special qualifications, not commonly found or readily created for the work required. On the formation of district school unions, the sanitary engineers might render for the occasion important local aid by inspecting the existing school buildings, which are the subject of such general complaint, and advising the local architects or others on the alterations they would require to fit them for healthy occupation, and to fix the maximum numbers which they ought to receive, as also the proper sort of district swimming schools and exercising grounds, all of which are required to be of a special character. After the completion of the structural sanitary arrangements, their action would come under the inspection of the local officer of health,

where, a proper appointment under the Public Health Act has been made, or where there has been none, the duties might be combined with those of the union medical officer. The regular visitation of schools, and the examination of the sanitary condition of the children assembled there, is one of the most profitable directions of the services of a preventive health officer. In some regulations of the duties of an officer of health which I was called upon to frame, were the following, which were approved by medical authorities and adopted.

“ In the case of small-pox or any other contagious or epidemic disease attacking any child who has frequented any school, he” (the officer of health) “ shall, as early as may be practical, visit such school, and inquire and examine whether there be symptoms of the infection or the prevalence of the disease amongst the other children, and give such instructions and advice as may be necessary for the prevention of the spread of the disease. In his inspection of schools, he shall take note of the children who may appear to be pallid, feeble, sickly, or in a peculiarly low condition of health, and inquire whether such condition has been produced by overcrowding, or defective ventilation, imperfect cleansing, or any other removable cause of debility or disease.”

Returns of the number and duration of the absence from schools on account of sickness, and the causes of sickness, form a most important source of sanitary statistics, which should be required for local instruction by the officer of health, and duplicates should be forwarded to the health officer of the Privy Council, and for him they should furnish matter for a report on the progress of the physical training of the children.

For this physical training an improved military and naval drill, including swimming and exercise, as taught in the Royal Military Asylum, Chelsea, is proved to be one of the best foundations for school gymnastics for boys. For the Norwood training school we got an old mast and tackle from the Admiralty, and I believe that Mr. Tuffnell obtained other old stores from that department for nine other district schools, for which they serve extremely well. From the Education Committee of the Privy Council he has obtained for some years past allowances for drill masters, which are proved to be most proper allowances for the attainment of simple educational results alone. I need not enter here into the

national policy and necessity of spreading qualifications and predispositions to a higher order of *recrutement*, a topic which is dealt with by such eminent military authorities as Lieutenant-General Shaw Kennedy, whose exposition I append, *vide* p. 146, with those of others, pp. 129 to 150, and by the Chaplain-General the Rev. Mr. Gleig. Both branches of the War Department might be asked to give active and extended aid for the attainment of their own objects to all district school training. There is bad drill as well as good drill, and good exercises are sometimes ill conducted, and the drill masters require competent professional inspection. Superior officers, whether on active service or retired, would perform an agreeable and gratifying service to good non-commissioned officers acting as drill masters, and to parents and pupils, by giving occasional inspections on field days and festivals.

In submitting such administrative combinations, I am as fully aware of the difficulty of getting different branches of civil administration, serving under different chiefs, to act in concert for the attainment of objects collateral to their special services, as military men are aware of the difficulty of getting different arms of military service to act cordially with each other—of the disposition of cavalry to neglect infantry, of artillery to leave both the other arms to themselves;—if the several forces were not subjected to a superior command, with power to insure their combined action. But if a serious determination can be obtained for efficient action for the repression of the hordes which prey upon society, and for the prevention of crime, mendicancy, and pauperism, a like superior civic authority and direction must be constituted and empowered to combine the different required branches of the civil services, including, so to speak, the local volunteer civic forces, for the attainment of the ends in view. Such an authority should derive its force from moral power, from superior opportunities of knowledge, from undivided attention to them, from proved special preparation, and zealous and responsible application of the knowledge obtained, and from a known judicial impartiality and freedom from political party or sectarian bias.

I believe I express the sentiments of officers engaged in this branch of service when I venture to represent, that unless secure provision be made for the application of these qualities, which the present changing political chieftainship of the Education Department of the Privy Council

almost excludes, the large improvement of public education which is now practicable must be left to after times and to an advanced civilisation, that will not tolerate the continuance of the degrading conditions under which large masses of the population are now reared. It is true that the advance of public education has been efficiently promoted in its earlier stages by some political chiefs who have been respected for their high principles and admired for their brilliant abilities by the permanent officers; but even if all party chiefs were alike able and zealous, the present stage and future progress of this branch of administration would require from them undivided attention and permanency of position. As a mere matter of financial administration, what is to be said for an arrangement which confides three quarters of a million per annum, governing some millions more, without securities for its efficient application, to the direction of chiefs who, as soon as they can have mastered a policy, or the special principles required for its execution, are changed; or who, if they elaborate any systematic improvements, will have to leave them to successors who, if well disposed, will have the like preparation to go through, but who, as party opponents, may be expected to give them a cold obstruction? Instances may be adduced where permanent officers have found the most obstructive opponents to the principles of the law by political partizans being suddenly placed over them as chiefs to direct its administration. For measures of elaborate preparation by permanent officers requiring careful consideration, only scraps of time or the most desultory attention can usually be obtained from the well-disposed parliamentary chiefs. In making such representations, I repeat that I am representing no peculiar view, but views common to permanent civil servants who are zealous for the improvement of public administration. The unfavourable conditions of political chiefs for the reception of new measures has indeed been recognized by high political authorities. Thus Lord John Russell, in his evidence before the Committee on Civil Salaries, stated it as "a defect in the Government of this country that the "time of Ministers is so very much absorbed with the "duties of their offices," meaning their political and parliamentary duties, "that there are very few of them who "can give their attention to a great subject and look to the "consequences to the country of the measures which are "adopted;" nor, it may be respectfully added, of the loss

of measures which are not adopted. The common practice of the Parliamentary political chief is much of this sort: Having been up late at night, he comes late in the day to the office, and he cannot stay to hear or read anything long, for he has to attend a Committee of the House, or it may be a Cabinet Council. When he returns he has some private letters to write, and then he must hurry to his dinner; and then to make a House, or to a debate on our foreign policy, on which a division is expected. Deputations he sees and hears, but does not inform, and he can render little more than eye-service to the public. For confident advances a foundation of particular knowledge is required, which he cannot acquire from paper representations; he can only obtain it by seeing to the facts for himself. In this branch of administration he must have seen children, seen schools, and school teachers, and seen methods of teaching, in order to judge even of inspectors' reports;—but I apprehend that the political chief will rarely have seen the whole of his immediate staff, or know most of the inspectors when he meets them. After the session is over, he must have relaxation, and he leaves town and the office. The description which Mr. Henry Taylor, so many years of the Colonial Office, gives in his "Statesman" of the common character of the service of political chiefs, a description confirmed by Sir James Stephen, who had even larger experience, will be recognized by others who have passed through permanent civil offices as so correct in all its features, and so applicable to existing arrangements made in new branches of administration on the guise of increasing responsibility to Parliament, and thence to the public, that I venture to cite it here.

"The greater part of the duties which are performed in the office of a minister are and must be performed under *no* effective responsibility. Where politics and parties are not affected by the matter in question, and so long as there is no flagrant neglect or injustice of which a party can take hold of, the responsibility to Parliament is merely nominal, or falls otherwise, only through casualty, caprice, and the misemployment of the time due from Parliament to legislative affairs. Thus the business of the office may be reduced within a very manageable compass, without creating public scandal. By evading decisions whenever they can be evaded; by shifting them on other departments whenever they can be shifted; by giving decisions upon superficial examinations categorically, so as not to expose the superficiality in expounding the reasons; by deferring questions till, as Lord Bacon says, 'they resolve of themselves;' by undertaking nothing

for the public good which the public voice does not call for; by conciliating loud and energetic individuals at the expense of such public interests as are dumb, or do not attract attention; by sacrificing everywhere what is feeble and obscure to what is influential and cognizable. By such means and shifts as these, the single functionary granted by the theory may reduce his business within his powers, and perhaps obtain for himself the most valuable of all reputations in this line of life, that of 'a safe man;' and if his business, even thus reduced, strains, as it well may, his powers and his industry to the utmost, then (whatever may be the theory) the man may be without other reproach, at least than that which belongs to men placing themselves in a way to have their understandings abused, their sense of justice corrupted, their public spirit and appreciation of public objects undermined. Of and from those measures which are forced upon him to choose, that which will bring him the most credit with the least trouble has hitherto been the sole care of a statesman in office, and as a statesman's official establishment has hitherto been constituted, it is care enough for any man. Every day, every hour, has its exigencies, its immediate demands; and he who has hardly time to eat his meals cannot be expected to occupy himself in devising good for mankind. 'I am,' says Mr. Landors, 'statesman,—a waiter at a tavern where every hour is dinner time, and 'pick a bone upon a silver dish;' the current compulsory business he gets through as he may; some is undone, some is ill done, but at best, to get it done is an object which he proposes to himself. But as to the inventive and suggestive portions of a statesman's business, he would think himself an Utopian dreamer if he undertook them, and such he would be if he undertook them in any other way than through a re-constitution and reform of his establishment. One who with competent knowledge should consider well the number and magnitude of those measures which are postponed for years, not for want of practicability, but for want of time and thought; one who should proceed with such knowledge to consider the great means and appliances of wisdom which lie scattered through this intellectual country, squandered upon individual purposes,—not for want of applicability to national ones, but for want of being brought together and directed; one who, surveying these things with a heart capable of a people's joys and sorrows, their happy virtue or miserable guilt on those things dependent, should duly estimate the abundant means unemployed, the exalted ends unaccomplished, could not choose, I think, but say within himself, that there must be something fatally amiss in the very idea of statesmanship on which our system of administration is based, or that there must be some moral apathy at what should be the very centre and seat of life in a country; that the golden bowl must be broken at the fountain, and the wheel broken at the cistern."

As examples of the "miserable guilt," on these conditions of inattention and administrative default dependent,

and the domestic joys in happy children frustrated, there may be adduced the continued neglect of the representations made by assistant commissioners and by school inspectors, amongst others most prominently and perseveringly, almost to his dying day, by the late Mr. Jellinger Symons, of the ruin of orphan and destitute children, by keeping them under the depraving influences of adult paupers in the union houses, in the face of the pre-eminent success of the separate treatment in separate buildings or district schools;—the neglect, from ignorance, of the great educational elements, in economy and efficiency of the division of educational labour, and the physical training under the half-time system evolved in the Norwood school, sufficiently for extended application, some 20 years ago;—the disregard of the representations of inspectors displaying the illusory and often fraudulent character of the education given under the Factory Act to large masses of children constituting the bulk of the future manufacturing population, and continued in the face of the remarkable success of the half-time system in schools of the character intended; which representations of educational ruins have been made, I believe, for nearly a quarter of a century by Mr. Leonard Horner, until in blank despair he abandoned further efforts to gain attention to them. “I have,” he says in his last report for 1859, “pointed out at some length in former reports how the education of the children *professedly* provided for is, in numerous cases, an utter mockery; how the protection of the workpeople against bodily injuries and death from unfenced machinery, also *professedly* provided for, has become practically a dead letter; and how the reporting of accidents is, to a great extent, a mere waste of public money. As there is no disposition in any quarter to have the glaring defects in the law corrected, it is unnecessary for me to enlarge upon them any more.” To these examples may be added the persistent neglect of the reports and representations made almost from year to year, since our Poor Law Commission of Inquiry, of the malversation of the funds of charitable foundations for the education and improvement of the poorer classes;—the discouragement to the completion of the investigations and the reports of the constabulary force commissioners, which involved in the improved action of a preventive police, in concurrence with the relieving and other local officers, measures for the suppression of habitual mendicancy, for clearing

away juvenile mendicancy and juvenile delinquency, the great seed plots of adult crime, comprising the large ragged school class at last brought into notice by voluntary philanthropy.

Impartial local administrators bear witness that since the administration of the laws for the relief of the poor and those for the improvement of the public health have been placed under the direction of changing political chiefs, improvement, where there was much to do, has been checked, not to say entirely arrested, and the interest of men of education in local administration diminished, and improvements, attended with considerable reductions of expense, prevented. The lowered condition of the administration is made manifest by the lowered and perfunctory character of the annual reports and the public documents, whilst there are subjects of the highest local as well as general interest requiring treatment. The present condition of divided and changing attention of the chief officers to the administration of the Parliamentary grants and other educational funds,—will be found to be at the expense of extensive physical injury and mental failure, and generally with the loss of more than half the proper effect of all the money expended for popular education. The Civil Service Commission, with the addition of provision for an entire undivided attention to the serious labour required, may be presented as an example of advantageous arrangement. Such a board as a real Committee of Privy Council might, if it be thought fit, have one changing political member, but without powers on his part derogatory of the right and duty of independent decision and representation on the part of the permanent members.

It appears from such information as I have been enabled to collect from officers engaged in local civil service in various parts of the country, from leading school teachers, and eminent successful educationists in Scotland as well as in England, that the question of local educational rates, or of increased educational expenditure to any considerable amount, or of augmented parliamentary grants, can only be properly raised as a general question after measures have been taken to ensure a more efficient application of the funds, private as well as public, and those from educational endowments, and charitable trusts, to their proper purposes; and that until this is done further advances of money are advances in comparative waste, or of inferior economical effect.

I think myself entitled to express a confident opinion on the executive machinery available for the application of the principles in question, and to state that if existing tried and proved results be duly consulted for guidance, if the existing general administrative means be combined with the existing local means for the right application of the existing pecuniary means, men like us, past the middle period of life, might expect to see, in a few years, a change in the whole moral and intellectual condition of the population, as great as any change produced, by improvements in physical science and art, in our own time.

First, as to those lowest classes in relation to whose condition we gave our earliest responsible public labour, namely, the orphan and destitute children, I have now to submit through you, as general conclusions, from the body of evidence I have collected,—

That by the exercise of improved educational power, and by physical and industrial, as well as mental training on the half-time system, as exemplified in district schools, moral failures (to an extent to disqualify from respectable service) have been reduced from a common average of more than 60 to less than two per cent. :

That by the exercise of improved educational power, and mental training of a still higher class, such as that of pupil-teachers, moral failures, to an extent to disqualify from respectable service, have been reduced to a common average not exceeding one per cent. :

That by improved early physical training, given by means of systematised gymnastics, congenital defects or bodily weaknesses in the rising generation may be removed or diminished, and the duration of the working ability and productive industry of the population, and especially of the urban population, considerably extended :

That by the physical training and mental as well as bodily aptitudes imparted at a small expense by the naval and military drill in the school stage, an addition is made of at least one-fifth to the civil efficiency and value of the male pupils as labourers in after-life :

That by legislation on sound principles, and by efficient executive administration, local as well as general, such improvements might be generally imparted to

the rising generation, and the improved moral as well as economical results be attained within a period of 10 years of the complete operation of appropriate measures.

That the improved educational power, if duly applied, is fully adequate to the extirpation, within such period, of hereditary pauperism, of hereditary mendicancy, and of habitual juvenile delinquency.

And as relates to the general population,—

That the usual courses of school teaching, which require five or six hours of mental effort from very young children of the average ages taught, from the seventh to the tenth year and above, in the common elementary schools, is largely in excess of their capacity of attention at those years, and in violation of the laws of psychology :

That the present excessive duration of sedentary application required from little children, beyond their proved capacity of voluntary and profitable attention, is mentally injurious, by inducing associations of weariness and disgust with the matters taught, by creating comparatively diffused, slow, and dilatory habits of mind, often provoking corporal chastisement :

That however good may be the sanitary condition of a school, however well it may be ventilated, warmed, and lighted, the common periods of six or even five hours of sedentary constraint required from young and growing children of the average ages attending schools for elementary instruction are in violation of the laws of physiology, injurious to the full bodily development of children, and to their vigorous aptitude for labour :

That by the present prolonged sedentary occupation in schools more extensive and grievous bodily injury is inflicted on young females than on males, from the habits of females allowing them less of out-door games or exercise :

That as school-houses are commonly constructed and schools conducted, without proper regard to sanitary science, they are the frequent sources of disease and of permanent bodily infirmity, and tend, together with excessive sedentary constraint, to aggravate an excessive infantile mortality :

That for the prevention of these evils a special

sanitary service applicable to schools is needed, for the correction of the common evils of their construction and the protection of the health of children therein :

That whilst the practice in good half-time schools of three hours' mental effort daily is proved to be adapted to the natural capacity of young children of from seven to eleven or twelve years of age ; as a provision obligatory on those engaged in productive labour, it is proved to act beneficially as a security against bodily overwork, preventing them from being worked during the same stages as men ;—all bodily as well as mental labour for young and growing children during the same length of hours as grown adults—being a source of deterioration of the labouring population of the country :

That by improved mental culture, by trained teaching on a large scale, with systematised gymnastics and drill, on the half-time system, inaptitudes are removed, and superior mental aptitudes are imparted, in combination with bodily aptitudes for honest and sustained industry and service :

That by teaching on a large scale, and on the half-time system, the period for imparting superior elementary knowledge, and bodily as well as mental aptitudes, may be reduced from an average period of six years to an average of three, and (including the cost of the bodily training) at an expense for educational power of less than one-half the present expense of the common education :

That the same educational power and the same schools may be extensively applied to the training of double sets of children, either on the same days or on alternate days, as may be most convenient for the demands of domestic service or productive industry, or of thinly populated rural districts, and popular education be conciliated with the demands for the industrial service of children :

That the saving of the annual rate of expense for educational power per head of pupils is to a great extent in proportion to the combination of numbers taught and the division of labour in teaching :

That on a view of the present general rate of expenditure on middle as well as lower class education, it

appears that by a proper application of the principle of the combination of numbers taught and the division of labour in teaching, double the number of children now under instruction may be better educated mentally and morally, and receive physical training also, at the present total amount of expenditure :

That the attainment of a like amount of mental and bodily accomplishment by the application of educational power on a small scale by means of single teachers is only practicable, if at all, at an increased rate of expense so great as practically to exclude not only the labouring classes, but the lower middle classes, from the benefits of equal amounts of education ; and (where schools on the large scale for the wage classes and with a division of educational labour are now in operation) places the middle classes generally at an injurious disadvantage :

That the responsible and efficient application of the funds voted by Parliament for the promotion of national education can only be ensured by acting through responsible paid local officers, and district school unions, instead of directly and singly upon between 6,000 and 7,000 unconnected schools or parishes :

That to ensure efficiency and economy in the education and training of the population, it is requisite to provide for the general application of the principle of administrative consolidation for classification and for a division of educational labour :

That enabling legislative provisions are requisite for the general formation of district school unions, for the combination of available means to obtain the best division and direction of educational labour by trained teachers ;—such legislative provisions to include powers for including in local school unions educational charities and such other charitable foundations devoted to the general good of the community as may be properly available.

That such enabling provisions are required to provide for gradations of instruction suitable to the middle classes, and are also necessary for obtaining the best teaching power for the children of the wage classes by inducing better qualified teachers

to enter and remain in the lower grades on the prospect of promotion to the higher positions created by the combination of means required for economy as well as efficiency :

That it will not be justifiable to continue advances of public money in aid of schools under avoidable conditions of inefficiency and waste in their application :

That until the proved means of economy and efficiency in the application of educational and training power have been put into extended operation ;—until by trials of improved arrangements, and by the adaptation of the principle of an educational division of labour to the reduction of the time and expense of training and education, it has been shown how far the time in years of school attendance as well as the expense may be reduced ;—until by the adaptation of the half school-time system of attendance and teaching in double sets it has been ascertained how far such short-time attendance may be conciliated to the demands for the domestic and industrial service of children ;—until it has been shown how much less repulsive school teaching may be rendered, and how far voluntary attendance may be increased and provided for within the existing amounts of expenditure,—the proper conditions for the legislative consideration of any general question of rating for educational purposes, or of compulsory school attendance, will not have arisen : lastly,—

That for the superior direction of the application of the administrative principles above recited there is requisite such special knowledge of them, with zeal and undivided and responsible attention for their promotion, and for the public hearing and adjudication of appeals from conflicting local parties, as may inspire public confidence and voluntary resort to the authority provided therefor.

I beg that you will present, with these conclusions, those hereunto appended, which relate to the special subject of the expediency of introducing the naval and military drill as part of the physical training which is required in a sound system of natural education. To the testimony of Lieut.-General Shaw Kennedy, the Rev. G. R. Gleig, the Chaplain-General of the Forces,

to which I have already referred, I might add that of Generals Sir John Burgoyne and Sir De Lacy Evans. With your advice, I helped Lord Elcho and Lord Stratheden in the formation of an association for the promotion of elementary drill in public schools, in connexion with the volunteer movement. That association has the support of his Grace the Duke of Newcastle, of Lord Palmerston, Earls Granville, Aberdeen, Ellenborough, Shaftesbury, De Grey and Ripon, Lords Lyndhurst, Brougham, John Russell, and Robert Cecil, as also the head masters of Eton, Westminster, Winchester, and St. Paul's schools. The whole of the pupils who are now under the military drill (with the best effects in the discipline of schools, as their head masters uniformly testify,) would, I believe, if they could be assembled for review in Hyde Park, present as numerous an array almost as that at the great volunteer review. But still the great body of the children who require the training for civil purposes, as described in the appended testimony of Mr. Whitworth, Mr. Rawlinson, Mr. Fairbairn, and the larger employers of labour, are apparently beyond the influence of that movement. There is also a large gap to be supplied for the introduction of the naval drill in the chief seaport towns and the schools along the coast, in the first instance; and the only means of supplying those omissions with economy will be the application of the principle of administrative consolidation of educational means.

As sustaining the educational conclusions, I herewith append the chief testimony I was led to collect under the circumstances as to its form which I have explained. The greater proportion of it may be submitted as the testimony of representative witnesses, which admits of large extension; such as that of Mr. Allen and Mr. Crampton, expository of the principle of a division of educational labour, and teaching on a large scale;—that of Mr. Moseley, on the expense of the several elementary branches of education;—that of Mr. Charles Paget, the member for Nottingham, on the applicability of the half-time system to the children of agricultural labourers;—that of Mr. Stuckey and Mr. Pugh, which is exceeded by testimony I have received from teachers of great experience in Scotland, as to the excess of the duration of the common school hours beyond the natural limits of the capacity of children for voluntary attention; that of Mr. Whitworth and Mr. Rawlinson, on the increased efficiency of drilled as compared

with undrilled labourers. I believe that the comprehensive testimony of Mr. E. C. Tufnell in support of the chief above-recited conclusions would have the corroboration of the majority of the school inspectors, according to the extent of their own observation and experience. Some important corroborative testimony was promised me, and the results of some trials in progress, which I have not yet received. I have not had time to take notes of a considerable body of medical testimony as to the physical evils entailed by the common duration of the sedentary constraint of female and male children, and the common conditions of school, which has been communicated to me verbally from time to time recently, and in the course of sanitary inquiries formerly. At two meetings of the medical officers of health of the metropolis, in whose collective districts upwards of 7,000 children die annually in the school stages of life, many of whom they are called upon to treat professionally; the subject of the insanitary conditions of schools was recently discussed, and resolutions as to the evil effects of the common extent of sedentary constraint, and the common conditions of school-houses, were unanimously adopted in nearly the terms which I have herewith submitted them.

My communications having been almost exclusively with you, I beg you will allow me, through you, to submit the above to his Grace the Chairman and your colleagues of the Commission.

I remain, dear Senior,

Yours ever truly,

N. W. Senior, Esq.
&c. &c.

EDWIN CHADWICK.



with untried laborers. I believe that the comparative testimony of Mr. C. L. Child is in support of the claim above stated. Conclusions would have the cooperation of the majority of the school inspectors according to the extent of their own observation and experience. Some of the more important testimony was presented and the results of some trials in progress, which I have not yet received. I have not had time to take notes of a considerable body of medical testimony as to the physical conditions of the common children of the common condition of schools, which has been communicated to me verbally from time to time recently, and in the course of many inquiries. At the meetings of the medical officers of health of the districts, in whose collective districts upwards of 7,000 children are annually in the school stage of life, many of whom they are called upon to treat personally; the extent of the sanitary conditions of schools was recently discussed, and results as to the real extent of the common extent of sanitary conditions and the common conditions of school-rooms were unanimously adopted in nearly the form which I have herewith submitted.

My communications having been almost exclusively with you, I beg you will allow me through you to send the above to his Grace the Chairman and your colleagues of the Commission.

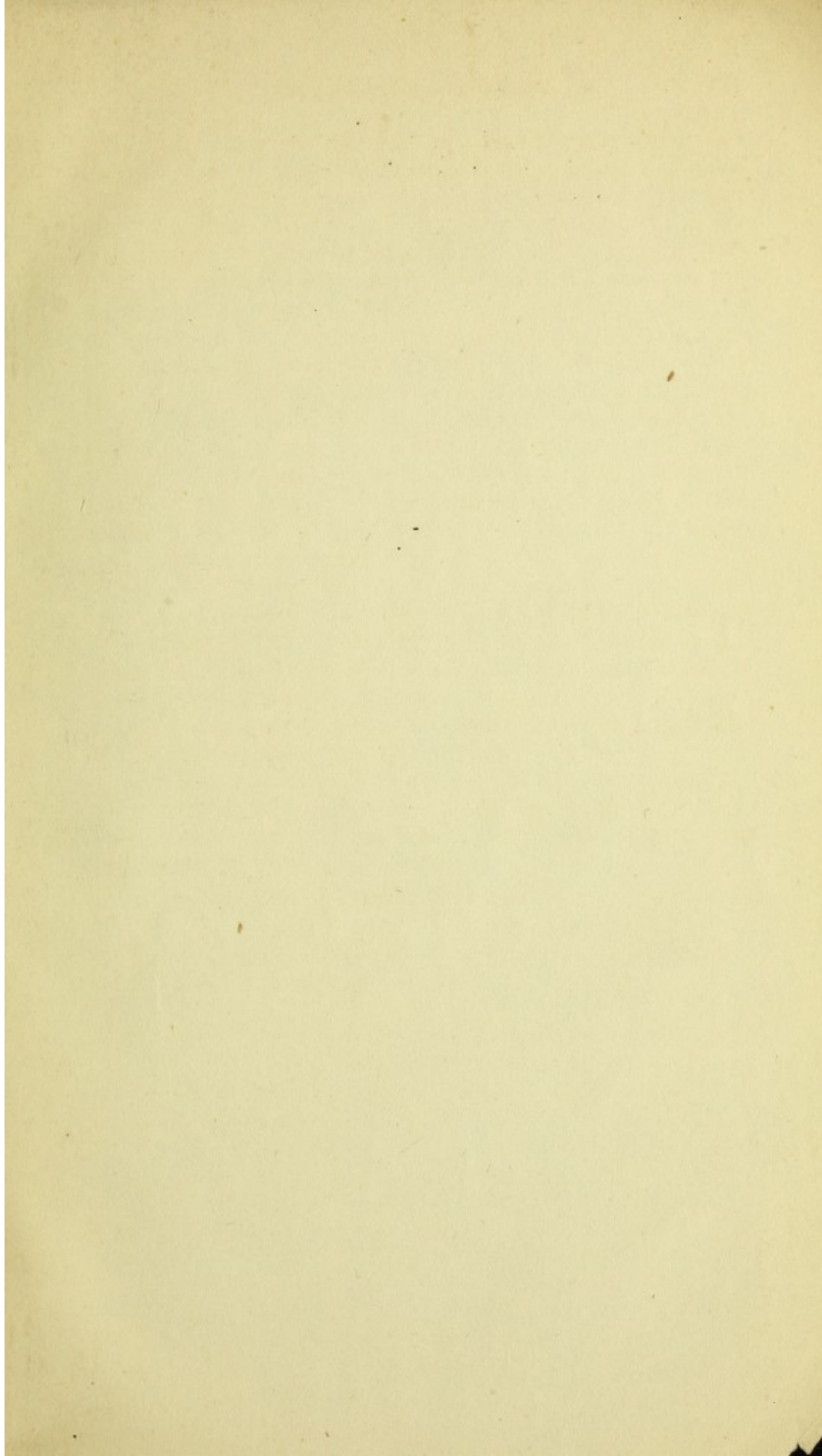
I remain, dear Sir,

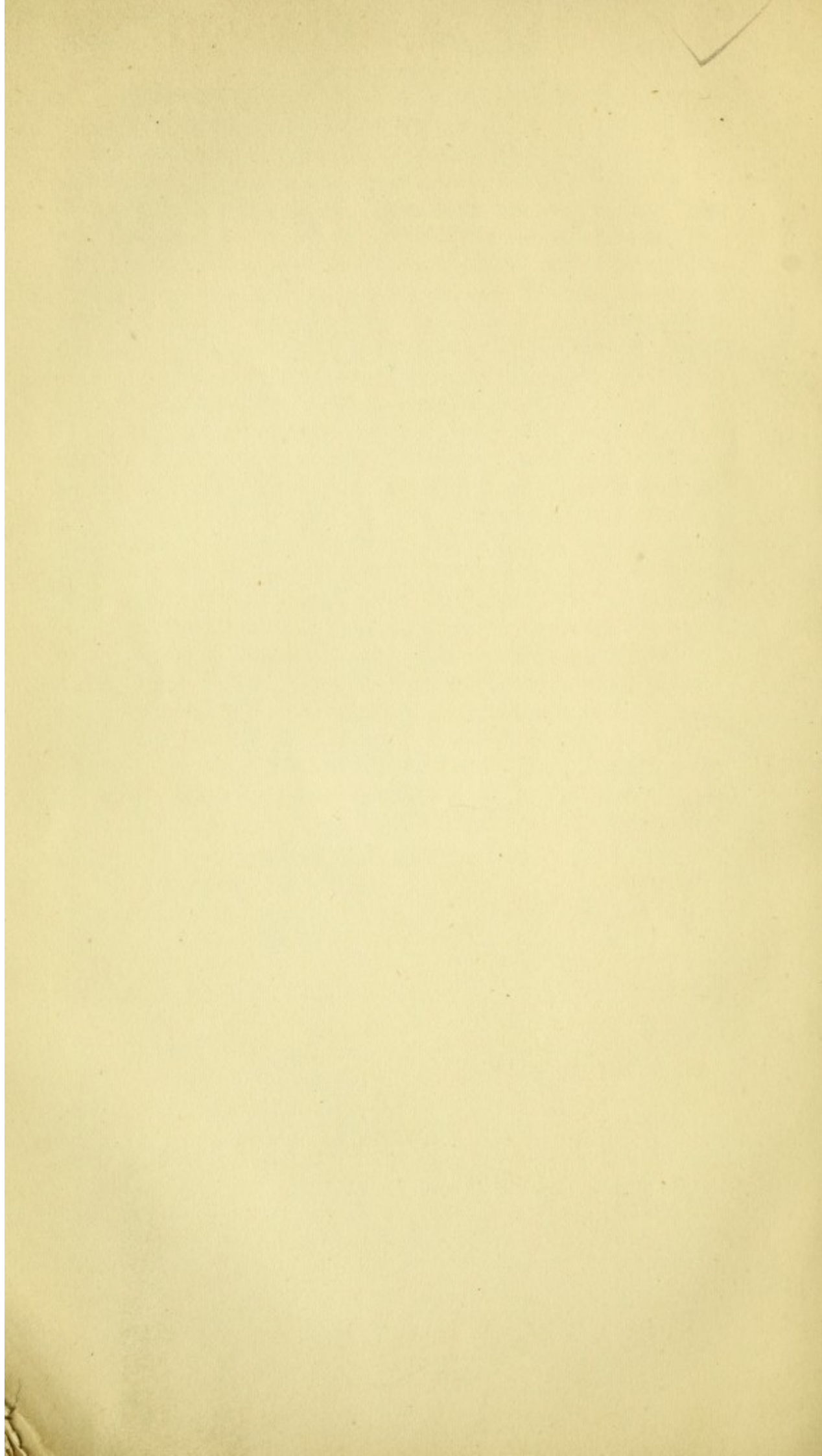
Yours very truly,

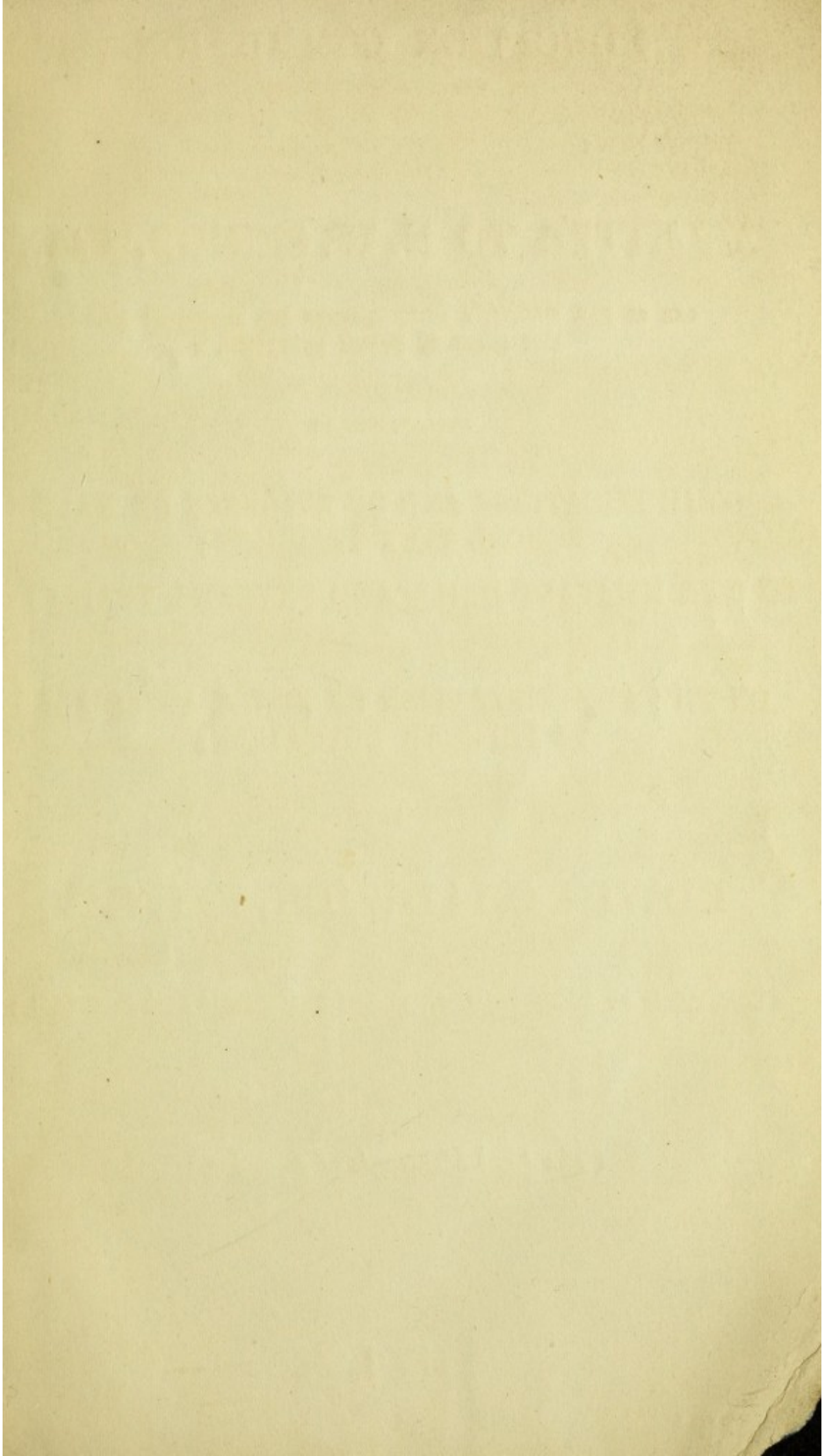
John Lubbock.

N. W. Senior, Esq.

Secy.







EDUCATION COMMISSION.

A LETTER TO N. W. SENIOR, Esq.,

ONE OF HER MAJESTY'S COMMISSIONERS FOR INQUIRING INTO
THE STATE OF PUBLIC EDUCATION,

EXPLANATORY OF

COMMUNICATIONS AND OF EVIDENCE ON HALF
SCHOOL TIME TEACHING;
ON THE MILITARY DRILL, AND PHYSICAL TRAINING;

AND

ON THE ADMINISTRATION OF FUNDS APPLICABLE
TO POPULAR EDUCATION;

BY

EDWIN CHADWICK, Esq., C.B.

(Pursuant to an Address of the House of Lords, dated 25th June 1861.)

(The Lord Monteagle of Brandon.)

1861.