







DOCUMENTS

OF THE

SCHOOL COMMITTEE

OF THE

CITY OF BOSTON,

FOR THE TEAR 1801



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SCHOOL DOCUMENT NO. 1-1891.

REPORT

OF THE

COMMITTEE ON MANUAL TRAINING SCHOOLS

ON A

MANUAL TRAINING HIGH SCHOOL.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

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Boston School Committee, Feb. 21, 1895.

IN SCHOOL COMMITTEE, BOSTON, Jan. 27, 1891.

Accepted, and the orders passed.

Ordered, That one thousand copies of the report of the Committee on Manual Training Schools on a Manual Training High School be printed.

Attest:

PHINEAS BATES,

Secretary.

* 6348.36 1891.

REPORT.

IN SCHOOL COMMITTEE, BOSTON, Jan. 27, 1891.

The Committee on Manual Training feel that the time has fully come to urge once more upon the City Council the necessity of a High School for Manual Training as a part of our public-school system. This Board has noticed with very great pleasure that His Honor the Mayor, in his inaugural address, has called attention to this necessity, and his position in this matter is universally approved by all classes of our citizens. Your Committee on Manual Training of last year had the matter continually before them, giving it constant thought and study, planning as to what could most wisely be done. They have had one reason, and only one, for not pressing the matter more earnestly before. The great need of increased Grammar and Primary school accommodations all over the city seemed to be of the first importance, and it was feared that urging the Manual Training School at that time would hinder in the building of these. To get children out of temporary and ill-ventilated buildings seemed to be the immediate and paramount duty. The great cost of the Roxbury High School, amounting to far more than was ever contemplated at the outset, has also been a hindrance to securing other necessities. Some of these difficulties no longer exist. The money has been appropriated for the four largest buildings, and the contracts have all been made for them complete within the appropriation. The money for the other five and for the enlargement of the Clinch School, South Boston, was in the loan order last December, and we trust will be

granted by the present City Council at an early day. There will be several more Grammar and Primary schools required before we can feel that we have overtaken our necessities. But all these additional buildings will be in the suburbs, most of them where land can be bought at a low price, and many of the buildings themselves will be small and can be built of wood, so that the call on the city treasury will not be as great as during the past year. We feel now that the great necessity for delay no longer exists, and the time to urge this special school has fully come.

There is still another favoring circumstance. The Horace Mann School for the Deaf has been completed the last year, leaving the old building on Warrenton street now vacant. There is also a twelve-room building on East street, which, on account of the shifting of population as a result of the movement of trade, is also vacant, and will never be needed again for school purposes. The other building on the same street is amply large to accommodate both the Grammar and Primary classes. The land in both cases is valuable, and ought to bring a good price. We would recommend the sale of this and the Warrenton-street site, the proceeds to be placed to the credit of an appropriation for this new Manual Training School.

We are following in this recommendation the precedent made when the present English High and Latin School was built. There were ordered sold at that time (see page 322, Minutes City Council, May 14, 1877): 1, The old English High and Latin School on Bedford street; 2, The old Bowditch School on South street; 3, The Savage Primary School on Harrison avenue; 4, The old Mayhew School on Hawkins street; and 5, The Franklin School on Washington street, near Dover. The first three buildings were sold, and the money went in part to pay the ten-year bonds, from the proceeds of which the present High and Latin School building was erected. But the last two buildings have

never been sold, and the school appropriations have therefore never had any credit for them. The old Mayhew School is now occupied as a temporary home under the charge of the Overseers of the Poor, and the Franklin School is occupied by several posts of the Grand Army and by the Milk Inspector. The value of these buildings, if credited to school-house appropriations, would not only provide for this present necessity, but go very far towards providing the other school-buildings so imperatively needed.

With regard to the site of the proposed building, there have been two propositions before us. The first, to build on the lot now owned by the city, and adjoining the present High and Latin School building; but there are three objections to this. 1. It is too small for what we may reasonably expect will be needed within a short time. 2. The High School is now full to overflowing, and if it and the Latin School should continue to grow in the future as in the past, this land will be needed for increased facilities for these schools at an early date. 3. We should be compelled on this lot to build, in harmony with the architectural design of the present structure, a very expensive façade, — too expensive and elaborate for the purposes of a workshop. We believe it will be economy in the end for the city to take the other plan, and purchase a lot easy of access to all, and yet of moderate cost, sufficiently large for future growth, and build upon it a very plain, simple building, either of one story and capable of being enlarged by additional stories, or building the wings of a larger building, other portions to be added in the future as they may be needed. The thought of the committee is to provide accommodations at once for a three years' course in wood-working, blacksmithing, forging, etc. We desire to provide at first for two hundred and sixteen pupils, but would secure land enough to provide finally for a building which should accommodate a thousand pupils. We believe the total expense of land and building will be about one hundred thousand dollars. The sale of the school sites above named should give fifty thousand dollars, and we would ask the City Council for an appropriation of fifty thousand dollars to cover the balance.

In bringing this whole matter again before the Board, we desire to call attention to the able report of James S. Murphy, Chairman of the Manual Training Committee of 1889, and the report of Superintendent Scaver made the same year, both of which can be found in School Document, No. 15, of 1889. On November 26th of that year the following order was sent to the City Council: "Ordered, That the city government be requested to erect a school building, adapted to manual training work, on the lot of land on the corner of Warren avenue and Dartmouth street, belonging to the city, or in any other convenient and central location." This order we understand is now being considered by the Finance Committee of the City Council.

It seems to be almost unnecessary to present anew the argument as to the importance of such a school. The idea was first conceived in Boston many years ago, but for various reasons has never been carried out in definite form. We say this with shame and regret. All over our country in our larger cities, partly through private munificence, and partly by public support, Manual Training High Schools have been established. Boston, which has been the first educationally in so many other things, is now lagging far behind. Educators all over the country have wondered what this apparent indifference in the past has meant. Some of these schools in other cities have been in existence for years, and their value has been demonstrated. They have passed what may be called the experimental period.

If there is any doubt anywhere as to the value of these schools, one need not now travel to Cleveland, Toledo,

Chicago, St. Paul, St. Louis, or even to New Haven or Fall River. The Rindge school in the city of Cambridge, and its magnificent success, is an unanswerable answer to all sceptics.

Let us not forget at the very outset that we ask not for a trade school, but for a Manual Training School. Both use tools, but the object is entirely different. One seeks to make raw materials into goods; the other, to make raw boys into self-respecting, industrious, manly men.

There are reasons, however, which may be briefly given in favor of such a school:—

First, we ask it as an act of justice to a large class of boys in our public schools. We all point with pride to our Latin School, with its splendid record of more than two hundred and fifty years in fitting boys for professions. We have equal satisfaction with our High Schools, fitting for the best places in mercantile life. But how about the boys who are to enter the industrial world? Are they not entitled to an equal chance? Should they not have, at the public expense, provision for such higher education as will fit them for advancement in their chosen calling? We do not believe that it is right for this city any longer to make such a discrimination.

Second, such schools are a great moral force in any community. It has been proved again and again that the best, the only way often to arouse the intellectual faculties of some boys is through their hands. They do not at first care for books. They are listless, heedless, indifferent. They are discouraged by repeated failures and ready for mischief of every sort. But when they are put before the bench and the anvil, another set of faculties is aroused; they begin to take a pride in the work in hand. In the class-room they dawdled over the book, and all the entreaty of the teacher had no effect. But when they stand before the anvil, and the red-hot iron must be moulded that instant or not at all,

then the lesson as to the importance and value of time is driven home with resistless power. So, at the carpenter's bench, with the drawings they have first made before them, they learn the necessity of accuracy and precision. The different parts must fit together. No sham will pass, and they have learned a lesson in truth. Furthermore, their work is done in the sight of all; they cannot carry it home and have it worked out by some older brother, and they learn self-reliance and true manliness. These faculties, and others that might be named, are the very basis of character. This is not theorizing; it is the universal result everywhere. In one of our universities it has been found for a series of years that the best scholar is invariably one who has had the Manual-School training. Their intellects have been quickened so that they are not afraid of new problems. Their shop-work has taught them patience, perseverance, and the concentration of every power. They have learned to be honest and true to the work in hand. Constantly with teachers who are dressed in working garb, and whom they have learned to respect, they are taught the all-important lesson that labor is honorable, and that the meanest thing in the world next to sin is idleness, and one always leads to the other. But we may go one step further. The statistics show that most of our criminals are made between sixteen and twenty years of age. These young men were not criminals at the start; but they did not love books. There were no openings for them, therefore, in the professions or in business. With no means of support, they naturally, through idleness, drift into crime. They cannot work; they are ashamed to beg; they therefore steal. If they had been taught to use their hands, and had been trained to use their strong bodies in industrial pursuits, they might be saved to society and to themselves.

Third, we need this school to properly complete the whole plan of Manual Training in our school system. What is

done in our elementary schools fails of its full fruitage and value without this. The Kindergarten system is being generally adopted all through the city. The little child is here taught to think, to observe carefully, to be persevering, his thinking and his efforts being wrought out with his fingers. It has been proven that the child who has been a year in the Kindergarten has its faculties so much quickened that it is practically a year in advance when it enters the Primary School, over those who have not had this training. Going on from this first step, within the past year provision has been made in the course of study to teach the principles and lay the foundation of Manual Training itself in all our Primary schools, and Primary teachers are being instructed to this end. In some of our Grammar schools the boys are being taught the use of tools, and the system is to be introduced into them all as rapidly as possible. But it can never be complete without this High School. It has been demonstrated again and again all over the country that the college and the seminary are necessary to lift to a higher plane the common school and make it more efficient. When in a community there is no higher education, the common school is usually of a very inferior order. The same principle is true in the matter of Manual Training. We need the school of the higher grade to give completeness to the whole system, and give enthusiasm and interest in it among all our pupils.

It is, after all, not altogether what our children learn, but the habits they form and the noble purposes awakened, that give to our schools their greatest value. Manual Training quickens the perceptive faculties, while at the same time it trains the eye and is invaluable to the earnest work of life right at hand. That is the broadest, truest education that trains the hand, the eye, and the mind; for while it is the mind that plans, and the eye that guides and directs in the industrial world, it is always the hand that executes. The motto, "The Cultured Mind, The Skilful Hand," which is over the entrance of the Manual Training School of another city, is our ideal.

SAMUEL B. CAPEN,

Chairman Committee on Manual Training Schools.

Ordered, That the Committee on Manual Training be authorized to advertise for proposals for a lot of land containing about 20,000 feet suitable for a High School for Manual Training, said lot to be located in that part of the Back Bay District, so called, between the Boston & Albany and Boston & Providence Railroads.

Ordered, That we hereby surrender to the City Council the old Horace Mann School-house on Warrenton street, and the old Grammar School-house on East street, both buildings being now empty, and of no further use for school purposes.

Ordered, That the City Council be requested to appropriate one hundred thousand dollars for a new Manual Training High School, and that the proceeds from the sale of the sites of the old Horace Mann School-house on Warrenton street, and the old Grammar School-house on East street, be applied to the redemption of this loan of one hundred thousand dollars.

SCHOOL DOCUMENT NO. 2-1891.

REPORT

OF THE

COMMITTEE ON DRAWING.



BOSTON:

ROCKWELL AND CHURCHILL, CITY PRINTERS.

1891.

IN SCHOOL COMMITTEE, BOSTON, Dec. 9, 1890.

Ordered, That the Committee on Drawing be authorized to report in print.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

To the School Committee: -

The Committee on Drawing submits the following report for the school year 1889-90:—

The work in the five Evening Drawing Schools, located in Roxbury, Warren avenue, Tennyson street, Charlestown, and East Boston, was very satisfactory to the committee. The drawing in these schools has reached a high degree of excellence; and results have been accomplished which would have been unattainable without the aid of a strong and efficient corps of instructors under able supervision.

Local exhibitions of the work done in the Evening Drawing Schools have for several years been held in different parts of the city, and have attracted a good deal of attention. In 1889 it was considered inadvisable to hold these exhibitions, for the reason that so many of the drawings and examples of modelling had been sent to the Paris Exposition. The exhibit which was sent to Paris embraced 331 works, carefully arranged so as to illustrate the course of study in each department of drawing and modelling in the Evening Schools. None of these departments were so well represented, in the best quality of work, as they might have been had the exhibition taken place two months later. This was particularly true in the department of decorative drawing or design, many of the students not having completed their best designs in time to send them with the others. Notwithstanding these and other hindrances to the preparation of an exhibit which would do full justice to the students and teachers, by presenting the best fruits of their labors, it was

with a feeling of no little pride in the exhibit as sent, and of satisfaction in its arrangement within the specified time and at an expense within the amount appropriated for the purpose, that it was handed over to the Committee on the Paris Exposition. The Committee on Drawing feels that great credit is due to the Director for his work in the preparation and arrangement of the exhibit.

The results of this exhibition, its generous treatment by the French Commissioners, and the very high compliment paid to it by the Pedagogical Society of Paris, are too well known to need repetition.

In the spring of 1890, as soon after the closing of the Evening Drawing Schools as the work could be arranged, the usual exhibitions were held in the respective schools. These exhibitions were well attended by the friends of the pupils, and by others interested. The Chairman of the Committee on Drawing visited each exhibition, and examined the work with care; the results of the work in each of the schools afforded ample evidence of the pupils' industry and successful effort, and of the high character of their instruction.

The number of accepted "certificate drawings" made by the students in these schools during the year was 3,138; all of these, together with a large number of unsatisfactory drawings, were examined by the Director. One hundred and thirty-seven certificates were awarded to students in the elementary classes, and 81 diplomas to members of the advanced classes; making the whole number of students in all the classes, who completed all the drawings and passed the required examinations, 218. In addition to the above, the award for "excellent drawings" was made to 132 students, and that of "honorable mention" to 103.

It must be remembered, however, that these figures do not represent the whole amount of work done, nor all the good results which have been accomplished. Those pupils who did not complete the year's work, and those who failed to pass successful examinations, received, in common with the others, an amount of instruction which will be of practical value to them, even though they receive no subsequent instruction, as many of them are now receiving, in our schools.

The practical advantage to pupils of their training in the Evening Drawing Schools is shown by the fact that a good percentage of those who have been careful and painstaking students are known to be receiving better wages than they earned before entering these schools, or than they could ever expect to earn without the knowledge of drawing which they obtained in them. The most notable illustrations of the pecuniary value of our training in drawing - one of them being, perhaps, an extreme case - are the careers of two students, neither of whom had previously earned more than six hundred dollars in a year. One of them now holds a position as draughtsman in a large machine-shop at a salary of fourteen hundred dollars a year. The other sold his design of an automatic machine, the drawings for which were made in the school, for the sum of twenty-five hundred dollars, and is receiving a yearly salary of fifteen hundred dollars. These and many similar facts, which might be quoted were it deemed necessary, indicate that the thorough instruction given in these schools is producing good practical results.

The examinations of applicants for special-grade certificates were held by the Director of Drawing early in September. There were fifteen applicants who desired to teach in the Evening Drawing Schools. Of this number seven passed successful examinations and received certificates; the remaining eight either withdrew before completing the examination, or failed to pass. In order that we may sustain a high order of work in our Drawing Schools, it is necessary that these schools should be provided with the best teachers to be obtained; for this reason the standard of certificate examinations is kept correspondingly high.

Since the last report the Director of Drawing has begun a course of lectures at the Normal School on "Methods of Teaching Drawing in the Public Day Schools;" this course, under the new arrangement of the classes and the different allotment of time, will be finished before the January examinations. He has also given, in the rooms at Mason street, a lecture on "The Relation between Drawing in our Public Schools and Manual or Industrial Training,"-a subject which is deservedly attracting much attention. He has answered, either by letter or in person, a large number of communications from masters and teachers in the different grades, has prepared examination papers for annual and semi-annual examinations in all the day schools, and has visited the several Evening Drawing Schools on Mondays, Wednesdays, and Fridays, for the purpose of consulting with the teachers, and observing the methods of instruction and the general conduct of the classes. The Director has also visited as many classes as possible in the day schools, spending the time devoted to this purpose in examining results of the drawing instruction as given by the regular teachers, and in assisting them in their work. He has prepared a revision of the course of study in drawing for the Primary and Grammar Schools, which has been accepted by the Board of Supervisors, to be incorporated by them in the revision of the whole course of study. He has also prepared a course of study in drawing for the Normal School, which is much more normal in character than any previous plan of drawing instruction for that school.

In so far as the committee has been able to examine the work in drawing in the day schools, the results have been satisfactory; in the High Schools especially so. While there has been no effort made to treat drawing as a subject of supreme importance, at the same time its value as a factor in our common-school education, especially in its relation to manual training, has been constantly kept in view. The

changes made in the course of study in drawing, which have been recently adopted, were intended to bring the methods of study in this subject not only into more complete harmony with industrial work, but also with other departments of instruction. In order to carry out this new course of study an additional supply of models will be necessary, both in the Primary and in the Grammar Schools.

For the Committee on Drawing,

CHARLES M. GREEN,

Chairman.



SCHOOL DOCUMENT NO. 3 — 1891.

REPORT

OF THE

COMMITTEE ON SALARIES.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.



REPORT.

In School Committee, Boston, Feb. 24, 1891.

The Committee on Salaries, in accordance with the Rules, present their annual report.

During the brief period since the organization of the Board this year, your committee have made some examination into the system hitherto adopted in regulating the salaries of the several grades of instructors, and have found its rules so filled with inconsistencies, and their application so fraught with injustice, that they would have been glad to have presented some new plan by which the system should be recast, and a more satisfactory method of regulating salaries be adopted. But the Mayor having called for the estimates for school expenses for the coming year so much earlier than usual, the Board has approved and asked for appropriations based upon last year's schedule of salaries. Your committee, therefore, do not deem it wise to suggest any changes in salaries for the coming year, but propose to consider the subject further, with a view of presenting at some future time such modifications of existing rules and application thereof to the schedule of salaries, as may remove existing objections to the present plan.

Upon the request of the Committee on Drawing, the committee ask for further time to report salaries for instructors of evening drawing schools.

The committee recommend the passage of the following orders.

For the Committee,

BENJAMIN B. WHITTEMORE,

Chairman.

1. Ordered, That the salaries of instructors of the public schools be for the ensuing school year as contained in the following schedule:—

NORMAL SCHOOL.

| Head-Master | \$3,780 |
|---|---------|
| Sub-Master, first year, \$2,196; annual increase, \$60; maximum . | 2,496 |
| First Assistant, first year, \$1,440; annual increase, \$36; maximum, | 1,620 |
| Second "first year, \$1,140; annual increase, \$48; maximum, | 1,380 |
| ****** | |
| HIGH SCHOOLS. | |
| Head-Masters | \$3,780 |
| Masters | 2,880 |
| Junior-Masters, first year, \$1,008; annual increase (for thirteen | |
| years), \$144; salary for the fourteenth and subsequent years, | |
| with the rank of master | 2,880 |
| Assistant Principal | 1,800 |
| ¹ First Assistants | 1,620 |
| Assistants, first year, \$756; annual increase, \$48; maximum. | 1,380 |
| | |
| GRAMMAR SCHOOLS. | |
| Masters, first year, \$2,580; annual increase, \$60; maximum | \$2,880 |
| Sub-Masters, first year, \$1,500; annual increase, \$60; maximum . | 2,280 |
| First Assistants, first year, \$900; annual increase, \$36; maximum. | 1,080 |
| Second "first year, \$756; annual increase, \$12; maximum. | 816 |
| Third "first year, \$456; annual increase, \$48; maximum. | 744 |
| | |
| PRIMARY SCHOOLS. | |
| Second Assistants, first year, \$756; annual increase, \$12; maximum, | \$816 |
| Fourth "first year, \$456; annual increase, \$48; maximum, | 744 |
| KINDERGARTENS. | |
| | |
| Principals, first year, \$600; annual increase, \$36; maximum | |
| Assistants, first year, \$432; annual increase, \$36; maximum | 540 |
| ODDOLAT INSPOLICEODS | |
| SPECIAL INSTRUCTORS. | |
| Special Instructors of Music | \$2,640 |
| Director of Drawing | 3,000 |
| Teacher of Chemistry, Girls' High School | 1,620 |
| Assistant in """" | 804 |

¹ The rank of First Assistant (High Schools) shall be abolished, as the position now recognized shall become vacant in schools where first assistants are now employed. [Rules, Sect. 95.]

There are at present two first assistants (High Schools) in service.

| Teacher of Physical Culture and Elocution, Girls' High School "Girls' Latin School | |
|--|--------|
| Teacher of Drawing, Penmanship, and Elementary Method, Normal | |
| | |
| School | 1,080 |
| Director of French and German | 3,000 |
| Assistants | 1,500 |
| Director of Physical Training | 3,000 |
| Special Assistant in German in the Brighton High School — to | |
| serve three hours a week, and to be paid at the rate of four dollars | |
| per week of actual service. | |
| Horace Mann School for the Deaf — Principal | , |
| First Assistant | 900 |
| Assistants, first year, \$700; second year and subsequently | 800 |
| Instructors in Manual Training School | , |
| Instructors in Schools of Cookery, first year, \$456; annual increase, | |
| \$48; maximum | 744 |
| Instructor in School on Spectacle Island (including all expenses con- | |
| nected with the school, except for books) | 400 |
| Instructor Military Drill | • |
| Armorer | 800 |
| Teachers of sewing: — | |
| One division \$108 Seven divisions | \$540 |
| Two divisions 192 Eight divisions | 588 |
| Three divisions 276 Nine divisions | 636 |
| Four divisions 348 Ten divisions | 684 |
| Five divisions 420 Eleven divisions | |
| Six divisions 492 All over eleven divisions | 744 |
| Principal, Evening High School (per week), first year, \$30; second | |
| year, \$40; third year and subsequently. | |
| Assistants, Evening High School (per evening) | |
| Principals, Evening Elementary Schools, in schools where average | |
| attendance for month is 100 pupils or more (per evening), \$5; in | 1 |
| schools where average attendance for month is less than 100 | ·) |
| (per evening) | 4 00 |
| First Assistants, Evening Elementary Schools (per evening). | 2 50 |
| Assistants, Evening Elementary Schools (per evening) | 1 50 |
| Special Assistant Teachers, lowest classes Primary Schools (per | |
| week) | |
| | |

2. Ordered, That Masters elected as Principals of High Schools, whose average whole number for the preceding

school year exceeds one hundred pupils, receive \$288; Sub-Masters, elected as Principals, \$216; First Assistants, elected as Principals, \$72; each, in addition to the regular salary of the rank.

3. Ordered, That the salary of a temporary junior-master be at the rate of \$5 per day of actual service.

SCHOOL DOCUMENT NO. 4-1891.

NOMINATIONS FOR REËLECTION.

REPORT

OF THE

COMMITTEE ON NOMINATIONS.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.



REPORT.

IN SCHOOL COMMITTEE, BOSTON, March 10, 1891.

The Committee on Nominations have considered the nominations submitted to them by the committees in charge, and nominate for reëlection the following-named instructors, to serve during the pleasure of the School Committee, and for the term ending March 31, 1892, as specified.

The committee feel it to be their duty to call the especial attention of the Board to the subject of the appointment of extra teachers. They find this year a larger number of extra teachers is called for than ever before. In 1888 the number of teachers nominated in excess of the number allowed by the Regulations was 29; in 1890, 39, and this year, 52. In the judgment of your committee this is not wholly unavoidable. In several districts, especially in the rapidly-growing suburbs, the reasons for the appointment of extra teachers are strong - insufficient accommodations; necessity of maintaining classes outside the regular school buildings; necessity of establishing classes in certain growing sections which are remote from other schools. With the new school buildings soon to be erected, we feel confident that the number of extra teachers in the outlying districts will be considerably reduced. In certain other districts the insufficient seating capacity, and the necessity of preserving the present classification, at least until the close of the year, are acceptable and sufficient reasons in most cases to continue the present corps of teachers. Other cases which were presented last year, and have been presented this year in increased numbers, are those of districts where heretofore

no apparent necessities existed for additional teachers. change from semi-annual to annual promotions from the Primary to the Grammar Schools may affect, to some degree, the demand for extra teachers; and there may be other exceptional and unusual reasons applicable to the present time. The committee had this view of the matter last year, but find this year that the conditions have not materially changed, and the number of extra teachers asked for has increased. With the information at hand, we are inclined to the opinion that one reason for these extra teachers is the slow but constant reduction in the number of pupils in districts near the centre of the city, and, probably, to some extent to the classification of the schools. It should be remembered that the number of teachers is based not upon the average attendance, or the average whole number of pupils, but upon the greatest whole number belonging at any one time during the year; a liberal basis, and one that ought, we think, to give the necessary number of teachers to each school and district.

Your committee believe it would seriously interfere with the present work in the schools, and result in absolute detriment to the pupils, to make any radical changes at the present time, and they are strongly of the opinion that the present corps of instructors should be continued to the end of the year at least. They are, however, as strongly of the opinion that this subject should receive the careful consideration of every member of the Board. These extra teachers, if absolutely necessary, must and should be provided; but if there be any teachers who can be spared, they could be transferred to other districts, where teachers are wanted and thus save money which is so much needed, in other departments of our school service. We recommend that the schools be reclassified in September, with proper attention to the grading of the school work, and with special reference to the subject of extra teachers. If, upon such reclassification, it shall appear that some teachers can be spared from certain districts, we

recommend that they be transferred to other districts where teachers are needed, with the understanding that no new teachers shall be appointed until these extra teachers are so transferred.

In his last report (School Doc. 7, 1890) the Superintendent of Schools has given strong reasons why this matter of classification in our schools should receive our earnest consideration. Your committee are of the opinion that influencing vitally, as we believe it does, the standard of the instruction, the best results of our school work, and the employment of teachers, the subject should be thoroughly investigated and reported upon. We therefore recommend the passage of an order for this purpose.

Section 85 of the Rules provides that, —

The Regulations which fix the rank of teachers any school is entitled to shall not be held to require the reduction in rank of any regularly confirmed teacher who has been nominated for reëlection, to serve in the same school in which he is already serving, except as hereinafter provided. Immediately after the annual election, a list of teachers in service, with ranks higher than the number of pupils in the schools would allow by the Regulations strictly applied, if there be any such, shall be sent to the committees in charge. When vacancies occur in such ranks, the committees in charge shall consider the transfer of these teachers before the vacancies are filled in any other way. A teacher declining to be so transferred may thereupon be reduced in rank, as required by the Regulations.

Under the authority of the Rules, as above quoted, the following-named teachers have been nominated with ranks higher than the regulations strictly applied would allow:

Brimmer District. — One sub-master.

Charles Sumner District. — One first assistant.

Comins District. — One first assistant.

Martin District. — One sub-master; one second assistant.

Minot District. — One first assistant.

Winthrop District. — One second assistant.

We believe this rule is generally looked upon as one to be "more honour'd in the breach, than the observance", but one instance of a transfer in such cases having come to our knowledge. Its purpose seems to have begun and ended in the provision for preventing the reduction in rank of teachers. We are not sure that any stringent following of the rule would be best, nor are we at present ready to offer any recommendations; but we think it wise to mention these cases so that they may not be lost sight of, and in the hope that they may be at least considered when favorable opportunities for transfers occur. We suggest that there should be reasonable surety that the teacher of higher rank will not be needed in the school where he is serving before a transfer is made.

The Rules provide that there shall be not more than one ungraded class in a district. In several districts the character of the pupils and the best interests of the schools require the maintenance of more than one ungraded class. The Board by special vote has allowed six ungraded classes in the Eliot District, and two each in the Hancock, Lawrence, Phillips, and Wells Districts.

Your committee desire to call the attention of the Board to the subjects of tenure of office of teachers and of the appointment of new teachers to the service, especially to the higher positions. To render the tenure of office something more than the formal release of teachers from an annual reelection, to make the office of teacher in our schools more permanent, to attract the best talent the country affords for these positions, and to give to the tenure of office the real power and significance which it should have in our schools, renders it absolutely necessary that the work of the various committees should be performed with care and vigilance; that the records of the supervisors should be studiously examined, and that the recommendations of the principals should receive attentive consideration. One element of

powerful and important influence in the successful carrying out of the spirit and intention of the tenure of office act is the consistent action of the different committees. mittees should decide the important questions arising upon the same general principles. The rules have been carefully prepared and adopted upon the subject, but they must be ever kept in view and followed, and prompt and decisive action taken when the interests of the schools demand it. Your committee believe that the right principles have guided our committees, and that they have been actuated by the best motives and with the conviction that tenure of office means much to our public schools, to their increased usefulness and efficiency, and to their liberal and hearty support by all our people. Let us continue to make tenure of office mean everything that shall enhance the value of the instruction in our schools and encourage and stimulate our teachers to their best efforts.

It has been but a short time since the Board adopted the present plan of approved lists of teachers for promotion. During the past year we have been called upon to fill the places of two of our most successful and faithful masters. In both instances the approved list has been of invaluable service. We cannot put too much stress upon the importance of appointing to the positions of masters of our Grammar Schools men of high character and of undoubted faithfulness and success. Let us continue our wise course of the past and appoint to these positions of great trust men of broad education and of far-reaching moral power and influence in the community.

The present canvass of teachers leads us to believe that for the most part our teachers of every grade are performing well the duties assigned to them. There are still a few teachers in our schools who ought never to have been appointed, who are not, it is feared, fitted for their profession, and their terms of probation ought soon to cease. While we would ever be kind and generous, it is the *school* and not the *teacher* that must first be considered. It emphasizes the duty of caution at the first, and that no appointment should be made without the greatest care. And especially would we emphasize the constant necessity that no appointment should ever be made unless there is the highest moral character in the appointee. The "teacher is the school," and no intellectual attainments can ever compensate for a failure in those moral traits which are the crown and glory of life.

Your committee recommend the passage of the following orders, the second order under a suspension of the rules.

For the Committee,

SAMUEL B. CAPEN, Chairman.

Ordered, That the Board of Supervisors be directed to present a report to the Board on the subject of promotions in and classification of the Grammar and Primary Schools with such recommendations as they may deem desirable.

Ordered, That extra teachers be allowed in those districts where, from want of seating capacity, or to preserve the present classification, the Committee on Nominations, on the recommendation of the committees in charge, have included them in this report.

| NORMAL SCHOOL. | |
|---|------------|
| Greatest whole number belonging during the year | |
| To serve during the Pleasure of the School Committee. Dora Williams, Second Assistant. | |
| FOR TERM ENDING MARCH 31, 1892. Wallace C. Boyden, Sub-Master. | |
| On Probation. | |
| Laura Fisher, Special Teacher of Kindergarten Methods. | |
| RICE TRAINING SCHOOL. (Boys.) | |
| Greatest whole number belonging Entitled to 19 regular teachers, 1 special | 937 |
| For Term ending March 31, 1892. | |
| Miriam W. Dike, Second Assistant. | |
| On Probation. | |
| Second Assistants. | |
| Bessie H. Chapin, Mabel L. Warner. Mary C. Mellyn, | |
| | |
| LATIN AND HIGH SCHOOLS. | |
| BOYS' LATIN SCHOOL. | |
| Greatest whole number belonging during the year | 481 452 |
| To serve during the Pleasure of the School Committee. Francis De M. Dunn, Junior Master. | |
| FOR TERM ENDING MARCH 31, 1892. | |
| Junior Masters. | |
| Isaac B. Burgess, George E. Howes. | |
| GIRLS' LATIN SCHOOL. | |
| Greatest whole number belonging during the year | 212 207 |

| To serve during the Pleasuf Lyman R. Wi | te of the School Committee. lliston, <i>Master</i> . |
|---|--|
| For Term ending Mary J. Fole | |
| ENGLISH HIGH S | SCHOOL. (Boys.) |
| Greatest whole number belonging durin Average whole number belonging durin Entitled to | |
| For Term ending | G MARCH 31, 1892. |
| Junior | Masters. |
| Joseph Y. Bergen, Jr., Charles P. Lebon, James Mahoney, | Harry C. Shaw, Albert P. Walker. |
| On Pro | bation. |
| Junior . | Masters. |
| William T. Strong, | Samuel F. Tower. |
| GIRLS' HIG | H SCHOOL. |
| Greatest whole number belonging duri Average whole number belonging durin Entitled to 2 | ng the year |
| | RE OF THE SCHOOL COMMITTEE. Kaan, Assistant. |
| For Term ending | MARCH 21 1899 |
| Master. | Assistants. |
| Samuel Thurber. | M. Medora Adams, Zéphirine N. Brown, Isabel P. George. |
| ROXBURY HIGH SCHO | OOL. (BOYS AND GIRLS.) |
| Greatest whole number belonging duri Average whole number belonging duri | ng the year 410 |
| To serve during the Pleasu | RE OF THE SCHOOL COMMITTEE. |
| Junior Master. | Assistant. |
| Nathaniel S. French. | Susie C. Lougee. |
| For Term ending | MARCH 31, 1892. |
| $\cdot Assistants.$ | Persis P. Drake, |
| Nellie A. Bragg, | Edith A. Parkhurst. |
| On Pro | bation. |
| Junior Master. | Assistant. |
| John C. Ryder, | Augusta G. Williams. |

| DORCHESTER HIGH SO | HOOL. (Boys and Girls.) | |
|--|---|---|
| Average whole number belonging dur | ing the year | 3 |
| | MARCH 31, 1892. | |
| Junior Master. | Assistants. | |
| Albert S. Perkins. | Edith S. Cushing, Mary A. H. Fuller, Elizabeth M. Ritter. | |
| On Pr | obation. | |
| | ker, Assistant. | |
| CHARLESTOWN HIGH SO | CHOOL. (Boys and Girls.) | |
| Average whole number belonging dur | ring the year | 3 |
| For Term ending | 31, 1892. | |
| Edward F. Holde | n, Junior Master. | |
| WEST ROXBURY HIGH S | CHOOL. (Boys and Girls.) | |
| Average whole number belonging duri | ing the year | |
| FOR TERM ENDIN | G MARCH 31, 1892. | |
| Emily L. Cla | rk, Assistant. | |
| EAST BOSTON HIGH SCI | HOOL. (Boys and Girls.) | |
| Average whole number belonging duri | ng the year | |
| For Term ending | MARCH 31, 1892. | |
| | tants. | |
| Abby C. Howes, | Josiah P. Ryder. | |
| | | |
| FIRST D | IVISION. | |
| ADAMS DISTRICT. | (Boys and Girls.) | |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 9 regular | rammar School 492 | |
| Greatest whole number belonging to P Entitled to | rimary Schools | |

To serve during the Pleasure of the School Committee.

Clara Robbins, Second Assistant.

| CHAPMAN DISTRIC. | I. (BOYS AND GIRLS.) |
|--|----------------------|
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | rammar School 602 |
| Greatest whole number belonging to F Entitled to | |
| For Term ending | MARCH 31, 1892. |
| Third Assistant. | Fourth Assistant. |
| Kate L. Niland. | Nellie F. Holt. |
| EMERSON DISTRICT | C. (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 13 regula | rammar School 748 |
| Greatest whole number belonging to F Entitled to | Primary Schools |
| To serve during the Pleasur Bernice A. DeMeri | |
| FOR TERM ENDING | March 31, 1892. |
| Sub-Master. | Mary E. Sullivan. |
| Horatio D. Newton. | |
| | Fourth Assistant. |
| Third Assistants. | Caroline E. Nutter. |
| Fannie O. Bartlett, Emma J. Irving. | |
| $On P_{Y}$ | obation. |
| Second Assistant. | l |
| Annie S. Hayward. | Fourth Assistant. |
| Third Assistant. | Charlotte G. Ray. |
| Helen M. Slack. | |
| LYMAN DISTRICT. | (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 11 regula | rammar School 62 |
| Greatest whole number belonging to F Entitled to | |
| | |

To serve during the Pleasure of the School Committee. Nellie M. Porter, Second Assistant, Primary School.

FOR TERM ENDING MARCH 31, 1892. Third Assistant. Fourth Assistant. Mabel F. Wilkins. Lena E. Synette. On Probation. Third Assistant. Sub-Master. Herbert L. Morse. Emma M. Bates. SECOND DIVISION. BUNKER HILL DISTRICT. (Boys and Girls.) Greatest whole number belonging to Grammar School...... 746 Average whole number belonging to Grammar School............. 697 Entitled to 13 regular teachers, 1 special. Greatest whole number belonging to Primary Schools...... 588 Entitled to 11 teachers. To serve during the Pleasure of the School Committee. Annie F. McMahon, Third Assistant. FOR TERM ENDING MARCH 31, 1892. Third Assistant. Fourth Assistant. Kate T. Brooks. Ruth C. Mills. On Probation. First Assistant. Fourth Assistant. Harriet H. Norcross. Ella L. Thompson. FROTHINGHAM DISTRICT. (Boys and Girls.) Greatest whole number belonging to Grammar School...... 646 Average whole number belonging to Grammar School.................. 632 Entitled to 11 regular teachers, 1 special. Greatest whole number belonging to Primary Schools................. 509 Entitled to 9 teachers. FOR TERM ENDING MARCH 31, 1892. James E. Hayes, Sub-Master.

On Probation.

First Assistant. Bial W. Willard.

Second Assistant.
Sarah H. Nowell.

Third Assistants.
Mary Colesworthy.
Susan T. Dundon.
Cecilia A. Kelley.

Florence I. Morse.

| HARVARD DISTRIC | T. (BOYS AND GIRLS.) |
|---|---|
| Average whole number belonging to G | Grammar School |
| Greatest whole number belonging to 1 Entitled to | Primary Schools |
| To serve during the Pleasu | TRE OF THE SCHOOL COMMITTEE. |
| Third Assistant. | Fourth Assistant. |
| Elizabeth W. Allen. | Lana J. Wood. |
| For Term ending | G MARCH 31, 1892. |
| Third Assistant. | Fourth Assistants. |
| Olive J. Sawyer. | Elizabeth G. Desmond, Agnes A. Herlihy, Sarah J. Worcester. |
| On Pr | obation. |
| Third Assistant. | Fourth Assistant. |
| Myra F. Towle. | Theresa G. Power. |
| PRESCOTT SCHOOL | . (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 1 | rammar School 525 |
| Greatest whole number belonging to Pr Entitled to 8 | |
| To serve during the Pleasur Elizabeth J. Dohert | RE OF THE SCHOOL COMMITTEE. y, Fourth Assistant. |
| For Term ending | 3 March 31, 1892. |
| Sub-Master. | Fourth Assistants. |
| William H. Furber. | Ruphine A. Morris, |
| Third Assistant. | Lizzie Simpson. |
| Minnie E. Ward. | |
| WARREN DISTRICT | (Pova ava Crara) |
| | ` ' |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 12 regular | rammar School 680 |
| Greatest whole number belonging to F Entitled to | Primary Schools 376 o 7 teachers. |
| To serve during the Pleasu | RE OF THE SCHOOL COMMITTEE. |
| Third Assistant. | Fourth Assistant. |
| Alice M. Raymond. | Fannie L. Osgood. |

FOR TERM ENDING MARCH 31, 1892. Katharine A. Sweeney, Third Assistant.

On Probation.

Abby G. Grandison, Fourth Assistant.

| THIRD D | DIVISION. |
|--|--|
| BOWDOIN DIS | TRICT. (GIRLS.) |
| Average whole number belonging to G | rammar School |
| Greatest whole number belonging to P Entitled to | Primary Schools |
| To serve during the Pleasur | RE OF THE SCHOOL COMMITTEE. |
| S. Frances Perry, | Second Assistant. |
| FOR TERM ENDING Third Assistant. Martha T. O'Hea. Fourth Assistants. Mary E. Abercrombie, | J MARCH 31, 1892. Julia G. L. Morse, Mary E. O'Leary, Harriet L. Smith. |
| On Pro | bation. |
| E. Laura Tilden, | |
| ELIOT DISTR | RICT. (Boys.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 14 regula | |
| Greatest whole number belonging to P Entitled to | |
| For Term ending | 3 MARCH 31, 1892. |
| Sub-Masters. Walter A. Robinson, John J. Sheehan. | Agnes C. Moore, Genevieve C. Roach. Fourth Assistants. |
| Third Assistants. Rose A. Carrigan, | M. Elizabeth McGinley, Sylvia A. Richards. |

| Greatest whole number belonging to P | rimary Schools 937 |
|---|--|
| Entitled to | 17 teachers. |
| For Term ending | G March 31, 1892. |
| Third Assistants. | Fourth Assistants. |
| Margaret A. Nichols, Margaret A. M. O'Dowd. | Matilda F. Bibbey, Florence E. Phillips, Henrietta Thompson. |
| On Pro | obation. |
| Second Assistant. | Third Assistant. |
| Katherine E. Gillespie. | Emma L. Mitchell. |
| PHILLIPS DISC | TRICT. (Boys.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 14 regular | rammar School |
| | rimary Schools |
| FOR TERM ENDING | 3 March 31, 1892. |
| Third Assistants. | Fourth Assistant. |
| Katharine A. Burns, Julia F. Holland. | Annie P. Elwell. |
| On Pro | bbation. |
| Sub-Master. | Fourth Assistants. |
| Herbert S. Weaver. | Angie P. S. Andrews, Margaret D. Mitchell. |
| Second Assistant, Primary School. | margaret D. Mitchell. |
| Jennie A. Dodson. | |
| WELLS DISTE | RICT. (GIRLS.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 8 regular | rammar School 509 |
| Greatest whole number belonging to P Entitled to | |
| To serve during the Pleasur | RE OF THE SCHOOL COMMITTEE. |
| Second Assistant, Primary School. | Fourth Assistant. |
| Sarah G. Fogarty. | Lillian W. Prescott. |
| For Term ending | MARCH 31, 1892. |
| Fourth Assistants. | Nellie M. Durgin, |
| Louise W. Betts, | Leila L. Rand. |

On Probation.
Hattie C. Leatherbee, Third Assistant.

FOURTH DIVISION.

| BRIMMER DIS | TRICT. (Boys.) | |
|---|---|--|
| Greatest whole number belonging to Grammar School | | |
| | rimary Schools | |
| To serve during the pleasure of the School Committee. Sub-Master. Gustavus F. Guild. Second Assistant, Primary School. Edith L. Stratton. | | |
| Third Assistant. Eliza E. Foster, | Fourth Assistant. Elizabeth G. Cahill, | |
| FOR TURN FROM | 3 March 31, 1892. | |
| Third Assistants. | Fourth Assistant. | |
| James Burrier, Lilla H. Shaw. | Alice Patten. | |
| PRINCE DISTRICT | . (Boys and Girls.) | |
| Greatest whole number belonging to Grammar School | | |
| Greatest whole number belonging to Primary Schools | | |
| To serve during the Pleasure of the School Committee. Seth Sears, Sub-Master. | | |
| For Term ending | March 31, 1892. | |
| Third Assistant. | Katherine L. Campbell, | |
| Clara E. Fairbanks, | Laura K. Hayward, Minnie R. Leavitt. | |
| Fourth Assistant. | Milline It. Deavitt. | |
| E. Isabella Bense, | | |
| QUINCY DISTRICT. (Boys.) | | |
| Greatest whole number belonging to Grammar School | | |
| Greatest whole number belonging to P Entitled to | rimary Schools | |
| FOR TERM ENDING MARCH 31, 1892. | | |
| Third Assistants. | Fourth Assistant. | |
| Margaret E. Carey, Angie C. Damon. | Abbie E. Batchelder. | |
| | | |

| On Pro | |
|---|---|
| George R. Keer | ie, Sub-Master. |
| WINTHROP DIS | TRICT. (GIRLS.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 15 regular | rammar School 82 |
| Greatest whole number belonging to P Entitled to 5 | |
| For Term ending Mary A. Reardon, | · · · · · · · · · · · · · · · · · · · |
| | |
| FIFTH D | IVISION. |
| DWIGHT DIST | RICT. (Boys.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 11 regular | rammar School 66 |
| Greatest whole number belonging to P Entitled to | rimary Schools |
| To serve during the Pleasur Sub-Master. | RE OF THE SCHOOL COMMITTEE. Fourth Assistants. |
| Henry C. Parker. | Eva L. Munroe, Mary E. O'Brien. |
| Second Assistant, Primary School. Agnes J. Cushman, | Mary E. O Brieff. |
| FOR TERM ENDING | March 31, 1892. |
| Third Assistants. | Fourth Assistant. |
| Sarah C. Fales, Clara P. Wardwell. | Sara Mock. |
| On Pro | bation. |
| Emma A. Child, | Third Assistant. |
| EVERETT DIST | PRICT. (GIRLS.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 12 regula | rammar School 68 |
| Greatest whole number belonging to P Entitled to | rimary Schools |

To serve during the Pleasure of the School Committee.

Mary H. Gibbons, *Third Assistant*.

| FOR TERM ENDING | MARCH 31, 1892. |
|--|--|
| Fourth Assistants. | Margaret H. Manning, |
| Marguerite J. Flynn. | Nellie G. McElwain. |
| On Pro | bation. |
| Second Assistant. | Third Assistant. |
| Lucy W. Eaton. | Elizabeth E. Hough. |
| | * |
| FRANKLIN DIS | TRICT. (GIRLS.) |
| Average whole number belonging to G | rammar School |
| Greatest whole number belonging to F Entitled to 1 | rimary Schools |
| FOR TERM ENDING | March 31, 1892. |
| Third Assistant. | Fourth Assistant. |
| Sarah N. Macomber. | Etta M. Smith. |
| On Pro | obation. |
| Second Assistant. | Abby A. Hayward, |
| Maude G. Hopkins. | Ida M. Mitchell, Marietta S. Murch. |
| Third Assistants. Lillian S. Bourne, | |
| HYDE DISTR | ICT. (GIRLS.) |
| Average whole number belonging to | Grammar School |
| | rimary Schools 470 8 teachers. |
| To serve during the Pleasu. Abby M. Thompson | RE OF THE SCHOOL COMMITTEE. |
| FOR TERM ENDING | March 31, 1892. |
| Third Assistants. | Fourth Assistant. |
| Sarah R. Wentworth, Etta Yerdon. | Carrie M. Bayley. |
| SHERWIN DIS | TRICT. (Boys.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 10 regula | rammar School |
| Greatest whole number belonging to F | Primary Schools 481 |

FOR TERM ENDING MARCH 31, 1892. Sub-Master. Mary F. Roome. E. Emmons Grover. Fourth Assistant. Third Assistants. Rose E. Conaty. Nellie F. Brazer. Mary B. Chaloner, On Probation. Sub-Master. Third Assistant. Frederick L. Owen, Jr. Elizabeth G. Dowd. SIXTH DIVISION. BIGELOW DISTRICT. (Boys.) Greatest whole number belonging to Grammar School...... 754 Entitled to 13 regular teachers, 1 special. Greatest whole number belonging to Primary Schools.... 708 Entitled to 13 teachers. To serve during the Pleasure of the School Committee. Cara W. Hanscom, Third Assistant. FOR TERM ENDING MARCH 31, 1892. Fourth Assistants. | Annie S. McKissick. Ida M. Condon, On Probation. Mattie A. Goodrich, Third Assistant. GASTON DISTRICT. (GIRLS.) Greatest whole number belonging to Grammar School............ 719 Average whole number belonging to Grammar School.... 680 Entitled to 13 teachers. Greatest whole number belonging to Primary Schools........... 507 Entitled to 9 teachers. FOR TERM ENDING MARCH 31, 1892. Second Assistant. Fourth Assistants. Carrie M. Kingman. M. Isabel Harrington,

Isabella J. Murray.

Third Assistant.
Margaret Cunningham.

| On Pro | bation. |
|--|---|
| Second Assistant. | Julia A. Noonan. |
| Clara A. Sharp. | Fourth Assistant. |
| Third Assistants. | Jennie G. Carmichael. |
| Mary S. Laughton, | |
| | |
| JOHN A. ANDREW DIST | TRICT. (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 13 regula | rammar School |
| Greatest whole number belonging to P Entitled to 1 | rimary Schools |
| | RE OF THE SCHOOL COMMITTEE. Fourth Assistant. |
| For Term ending | March 31, 1892. |
| Sub-Master. | Fourth Assistant. |
| Edgar L. Raub. | Caroline M. Walsh. |
| Third Assistant. | |
| Alice T. Cornish. | |
| On Pro | bation. |
| First Assistant. | Fourth Assistant. |
| Emma M. Cleary. | Annie M. Driscoll. |
| Third Assistant. Bertha E. Miller. | Grace E. Holbrook. |
| LAWRENCE DIS | TRICT. (Boys.) |
| | rammar School |
| Greatest whole number belonging to P Entitled to 16 re | rimary Schools |
| To serve during the Pleasur | RE OF THE SCHOOL COMMITTEE. |
| Annie L. Treanor, | Fourth Assistant. |
| For Term ending | MARCH 31, 1892. |
| Sub-Master. | Third Assistant. |

Margarette A. Moody.

George S. Houghton.

| LINCOLN DISTRICT. (Boys.) | |
|--|------------|
| Greatest whole number belonging to Grammar School | |
| Greatest whole number belonging to Primary Schools Entitled to 6 teachers. | 28 |
| To serve during the Pleasure of the School Committee. First Assistant. Martha F. Wright. Second Assistant. Sarah A. Curran. | |
| FOR TERM ENDING MARCH 31, 1892. | |
| Third Assistants. | |
| Nellie S. Henry, S. Josephine Lavery. | |
| On Probation. | |
| Emma L. Stokes, Third Assistant. | |
| NORCROSS DISTRICT. (GIRLS.) | |
| Greatest whole number belonging to Grammar School Average whole number belonging to Grammar School Entitled to 12 regular teachers, 1 special. | |
| Greatest whole number belonging to Primary Schools Entitled to 11 teachers. | 622 |
| For Term ending March 31, 1892. | |
| Helen E. Hobbs, Third Assistant. | |
| SHURTLEFF DISTRICT. (GIRLS.) | |
| Greatest whole number belonging to Grammar School | |
| Greatest whole number belonging to Primary Schools Entitled to 6 teachers. | 334 |
| To serve during the Pleasure of the School Committee. Lottie B. Lucas, Fourth Assistant. | |
| FOR TERM ENDING MARCH 31, 1892. Catherine E. DcDonald, Fourth Assistant. | |
| THOMAS N. HART DISTRICT. (Boys.) | |
| Greatest whole number belonging to Grammar School Average whole number belonging to Grammar School Entitled to 8 teachers. | 447 435 |
| Greatest whole number belonging to Primary Schools | 511 |

| To serve during the Pleasur Second Assistant. | E OF THE SCHOOL COMMITTEE. Third Assistant. |
|---|---|
| Sarah M. Tripp. | L. Idalia Provan. |
| FOR TERM ENDING | March 31, 1892. |
| Third Assistant. | Fourth Assistants. |
| Anastasia G. Hyde. | Lura M. Power, |
| . ' | S. Louella Sweeney. |
| | bation. |
| Fourth A Evelyn M. Condon. | ssistants. Bertha Peirce. |
| Everyn m. Condon. | Bertha Lence. |
| | |
| SEVENTH | DIVISION |
| SEVENTII I | —————————————————————————————————————— |
| COMINS DISTRICT | . (Boys and Girls.) |
| Greatest whole number belonging to G | rammar School 554 |
| Average whole number belonging to Grammar School | |
| | Primary Schools |
| To serve during the Pleasur Marcella M. Ryan, | E OF THE SCHOOL COMMITTEE. Fourth Assistant. |
| FOR TERM ENDING | MARCH 31, 1892. |
| | , Third Assistant. |
| | |
| | CT. (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 11 regular | rammar School |
| Greatest whole number belonging to E Entitled to | |
| To serve during the Pleasur | RE OF THE SCHOOL COMMITTEE. |
| Sub-Master. | Fourth Assistant. |
| Alanson H. Mayers. | Alice W. Peaslee. |
| FOR TERM ENDING | MARCH 31, 1892. |
| Third Assistant. | Fourth Assistants. |
| Alice W. Emerson. | Ada L. McKean, Emma L. Merrill. |

On Probation.
Helen Doherty, Third Assistant.

| DILLAWAY SC | CHOOL. (GIRLS.) |
|--|---|
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | Frammar School 58 |
| Greatest whole number belonging to F Entitled to 6 | |
| | RE OF THE SCHOOL COMMITTEE. y, Third Assistant. |
| For Term ending | G MARCH 31, 1892. |
| Third Assistant. | Fourth Assistant. |
| Elizabeth M. Blackburn. | Agnes A. Watson. |
| DUDLEY DIS | TRICT. (Boys.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | |
| Greatest whole number belonging to Entitled to | Primary Schools |
| To serve during the Pleasu | RE OF THE SCHOOL COMMITTEE. |
| First Assistant. | Third Assistant. |
| Mary McSkimmon. | Amanda E. Henderson. |
| | MARCH 31, 1892. |
| Third Assistants. | Fourth Assistant. |
| Margaret T. Dooley, | Mary A. Brennan, |
| Ida S. Hammerle, M. Alice Kimball, Frances Zimgiebel. | Lucy G. M. Card, Edith Hovey. |
| GEORGE PUTNAM DIST | CRICT. (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | |
| Greatest whole number belonging to F Entitled to | Primary Schools |
| | RE OF THE SCHOOL COMMITTEE. , Third Assistant. |
| For Term ending | G MARCH 31, 1892. |
| Third Assistant. | Fourth Assistant. |
| Maria F. Bray. | Amoritta E. Esilman. |

On Probation.
Blanche A. Morrill, Third Assistant.

| HUGH O'BRIEN DISTR | ICT. (Boys and Girls.) |
|--|--|
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | rammar School |
| Greatest whole number belonging to P. Entitled to | rimary Schools 72 o 13 teachers. |
| To serve during the Pleasur | RE OF THE SCHOOL COMMITTEE. |
| Third Assistant. | Fourth Assistant. |
| Ellen F. A. Hagerty. | Mary W. Currier. |
| FOR TERM ENDING | 3 March 31, 1892. |
| Sub-Master. | Third Assistant. |
| Abram T. Smith. | Katharine J. Keefe. |
| | · |
| Third Assistant. | bation. |
| Esther E. McGrath. | Fourth Assistant. Isabella L. Bissett. |
| Donor Di Macoratii | 1 Stabella 13. Dissecti |
| LEWIS DISTRICT. | (BOYS AND GIRLS.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | rammar School |
| Greatest whole number belonging to P Entitled to | rimary Schools |
| TO SERVE DURING THE PLEASU | RE OF THE SCHOOL COMMITTEE. |
| Second Assistant. | Fourth Assistants. |
| Ellen M. Murphy. | Caroline F. Seaver, |
| Third Assistant. | Alice M. Sibley. |
| Kate M. Groll. | |
| | |
| FOR TERM ENDING | |
| Sub-Master. | Fourth Assistants. |
| Henry B. Hall. | Fannie E. Merriam, Blanche L. Ormsby. |
| Third Assistant. | Blanche B. Ormozy |
| Mary E. Howard. | |
| On Pro | hation. |
| Grace M. Clark, | |
| | |
| LOWELL DISTRICT | |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | rammar School |

| Greatest whole number belonging to I Entitled t | Primary Schools |
|--|------------------------------|
| To serve during the Pleasu | TRE OF THE SCHOOL COMMITTEE. |
| Fourth Assistants. | Lizzie F. Fickett, |
| Marguerite G. Brett, | Ella F. Howland. |
| FOR TERM ENDING | g March 31, 1892. |
| Sub-Master. | Helen C. Laughlin, |
| Edward P. Sherburne. | Anna G. Wells. |
| Danara I. Shorounic. | |
| Third Assistants. | Fourth Assistants. |
| Bessie L. Barnes, | Lillian S. Hilton, |
| Ellen M. Farrell, | Clara I. Stevens. |
| On Pro | bation. |
| Third Assistant. | Fourth Assistants. |
| Sarah A. Lyons. | Rose A. Mohan, |
| | Jane J. Wood. |
| MARTIN DISTRICT | . (Boys and Girls.) |
| Greatest whole number belonging to G | Frammar School 361 |
| Average whole number belonging to G Entitled to 6 | rammar School |
| Greatest whole number belonging to P Entitled to 2 | rimary Schools |
| To serve during the Pleasur | DE OF THE SQUARE CONSUMERS |
| Anna F. Bayley, | |
| Anna P. Dayley, | 1 mi to Assistant. |
| | |
| TIX CAAMITY A | |
| EIGHTH | DIVISION. |
| AGASSIZ DIST | PRICT (Boys) |
| | , |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 7 | rammar School 402 |
| Greatest whole number belonging to P Entitled to 3 | |
| FOR TERM ENDING | March 31, 1892. |
| Sub-Master. | Third Assistants. |
| Arthur Stanley. | Mary I. Adams, |
| • | Carrie F. Parker. |
| | |

On Probation.
Caroline N. Poole, Third Assistant.

| ALLSTON DISTRICT | C. (Boys and Girls.) |
|---|---|
| | rammar School |
| Greatest whole number belonging to F Entitled to 1 | rimary Schools 544 0 teachers. |
| To serve during the Pleasu | RE OF THE SCHOOL COMMITTEE. |
| Sub-Master. | Second Assistant. |
| Alexander Pearson. | Annie E. Bancroft. |
| First Assistant. | Fourth Assistant. |
| Alice A. Swett. | Gertrude R. Clark. |
| For Term ending | 3 March 31, 1892. |
| Third Assistant. | Fourth Assistant. |
| Elizabeth C. Muldoon. | Ella L. Chittenden. |
| On Probation. | |
| Third Assistants. | Fourth Assistant. |
| Eva M. Cotton, Ida F. Taylor. | Agnes A. Aubin. |
| BENNETT DISTRIC | T. (Boys and Girls.) |
| Greatest whole number belonging to Grammar School | |
| Greatest whole number belonging to Entitled to | Primary Schools |
| For Term ending | March, 31, 1892. |
| Sub-Master. | Fourth Assistants. |
| Edwin F. Kimball. | Leslie D. Hooper, Annie M. Stickney. |
| Third Assistant. | Hame Pr. Stickney. |
| Sarah M. Taylor. | |
| On Probation. | |
| Third A | ssistants. |
| Rose S. Havey, | Mary E. Winn. |
| BOWDITCH DIS | STRICT. (GIRLS.) |
| | · · |
| Average whole number belonging to G | rammar School |
| Greatest whole number belonging to P | rimary Schools 290 |

| | G MARCH 31, 1892. |
|--|---|
| Third Assistants. | Fourth Assistants. |
| Emma L. McDonald, Alice M. Robinson, | Mary E. McDonald, Mary A. Riordan. |
| Elizabeth L. Stodder. | mary A. Mordan. |
| CHARLES SUMNER DIST | TRICT. (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | rammar School |
| Greatest whole number belonging to Entitled to S | Primary Schools |
| To serve during the Pleasu. | RE OF THE SCHOOL COMMITTEE. |
| First Assistant. | Fourth Assistant. |
| Maud G. Leadbetter. | Mary E. Roome. |
| Third Assistant. | |
| Alice M. Barton. | |
| For Term ending | Manage 21 1809 |
| Third Assistants. | Fourth Assistants. |
| Celia B. Hallstrom. | Grace J. Freeman. |
| Josephine A. K. Slayton. | Martha W. Hanley, Mary N. Sherburne. |
| $On \ Pr$ | obation. |
| Sub-Master | Second Assistant, Primary School. |
| Alaric Stone. | S. Louise Durant. |
| Third Assistant. | 77 |
| Margaret F. Marden. | Fourth Assistant. Katharine M. Coulahan. |
| | |
| MOUNT VERNON DIST | RICT. (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to C Entitled to | rammar School |
| Greatest whole number belonging to I Entitled to | Primary Schools |
| To serve during the Pleasur Mary C. Richards, | E OF THE SCHOOL COMMITTEE. Fourth Assistant. |
| FOR TERM ENDING | March 31, 1892. |
| Fourth Assistants. | Anna R. French, |
| Mary Butler, | Mary C. Moller. |
| On Probation. | |
| Third Assistant. | Fourth Assistant. |
| Marian A. McIntyre. | Eliza M. Warren. |
| · · · · · · · · · · · · · · · · · · · | |

NINTH DIVISION.

| EDWARD EVERETT SCI | HOOL. (Boys and Girls.) |
|--|--|
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 10 regula | rammar School 585 |
| Greatest whole number belonging to F Entitled to | |
| To serve during the Pleasur Mary H. Reid, F | |
| For Term ending | MARCH 31, 1892. |
| Fourth A | ssistants. |
| Lucy G. Flusk, | Fannie Frizzell. |
| On Pro | bhation. |
| Gertrude Goodwin | , Third Assistant. |
| | <i>•</i> |
| GIBSON DISTRICT | . (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | rammar School 394 |
| Greatest whole number belonging to F Entitled to | |
| For Term ending | March 31, 1892. |
| Third Assistants. | Fourth Assistants. |
| Jessie C. Fraser, | Florence M. DeMerritt, |
| Annie H. Pitts. | Annie C. McFarland, Kate L. Pierce. |
| On Pro | bation. |
| Third Assistants. | Fourth Assistant. |
| Emily A. Evans, Ellen L. Pratt. | Bessie C. Jones. |
| HARRIS DISTRICT. | (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | |
| Greatest whole number belonging to Entitled to | Primary Schools 306 5 teachers. |

To serve during the Pleasure of the School Committee. Cora I. Young, Third Assistant.

FOR TERM ENDING MARCH 31, 1892.

Fourth Assistant.

Third Assistant.

| M. Ella Tuttle. | Bertha F. Cudworth. |
|--|--|
| $Q_n P_n$ | obation. |
| | urth Assistant. |
| <u>,</u> 1, 1 | |
| HENRY L. PIERCE DIST | TRICT. (Boys and Girls.) |
| | rammar School 267 |
| Average whole number belonging to G Entitled to | rammar School |
| Chartest whole manhan helengian to D | minerana Calcada |
| Entitled to | rimary Schools |
| To serve during the Pleasur | RE OF THE SCHOOL COMMITTEE. |
| Lucina Dunbar, | Third Assistant. |
| For Term ending | G MARCH 31, 1892. |
| Third Assistants. | Fourth Assistants. |
| Sarah L. Park, Helen A. Woods. | Louise L. Carr, Elinor F. Decatur. |
| Heien A. Woods. | Ellior F. Decatur. |
| | bation. |
| Second Assistant. | Fourth Assistants. |
| Lizzie C. Estey. | Keziah J. Anslow, Florence C. Pond. |
| Third Assistant. | |
| Anna H. Farrar. | l . |
| MATHER DISTRICTS | S. (Boys and Girls.) |
| Greatest whole number belonging to G | rammar School 601 |
| Average whole number belonging to G Entitled to | rammar School 570 |
| Greatest whole number belonging to H | rimary Schools 516 |
| Entitled to | |
| To serve during the Pleasur | E OF THE SCHOOL COMMITTEE. |
| Second Assistant. | Fourth Assistant. |
| Kate A. Howe. | Mary E. Bradley. |
| For Term ending | MARCH 31, 1892. |
| Third Assistants. | Fourth Assistant. |
| Elenora R. Clare, Mary E. Nichols. | Lena Le V. Dutton. |
| · | |
| On Pro | |
| Third Assistant. Annie L. Bennett. | Fourth Assistants. Josephine W. Greenlaw, |
| Anne D. Dennett. | Clara H. Hinds. |

| MINOT DISTRICT. | (Boys and Girls.) |
|--|--|
| Greatest whole number belonging to G Average whole number belonging to G Entitled to 5 regular | |
| | rimary Schools |
| | RE OF THE SCHOOL COMMITTEE. |
| FOR TERM ENDING Third Assistant. E. Gertrude Cushing. | MARCH 31, 1892. Fourth Assistant. Edna A. Hill. |
| | obation. ssistant, Primary School. |
| STOUGHTON DISTRICT. (Boys and Girs.) | |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | rammar School |
| Greatest whole number belonging to Pr Entitled to | rimary Schools |
| To serve during the Pleasur Cornelia M. Collamo | RE OF THE SCHOOL COMMITTEE. ore, Third Assistant. |
| For Term ending | March 31, 1892. |
| Sub-Master. | Third Assistants. |
| Charles C. Haines. | Clara A. Brown, Annie S. Coffey. |
| Second Assistant. Annie A. Webster. | Fourth Assistant. H. Adelaide Sullivan. |
| 0.7 | |
| Elizabeth L. B. Steam | obation. rns, Third Assistant. |
| TILESTON DISTRICT | T. (Boys and Girls.) |
| Greatest whole number belonging to G Average whole number belonging to G Entitled to | rammar School 120 |
| Greatest whole number belonging to Primary School | |
| To serve during the Pleasur | |

FOR TERM ENDING MARCH 31, 1892. Ida T. Weeks, Third Assistant.

KINDERGARTENS.

FOR TERM ENDING MARCH 31, 1892.

Normal School. Mabel Hooper, Principal; Ada C. Williamson, Assistant.

FIRST DIVISION.

Emerson District, Noble School. — Lelia A. Flagg, Principal; Flora S. McLean, Assistant.

Lyman District, Webb School. — Clara L. Hunting, Principal; Helen J. Morris, Assistant. (On Probation.)

SECOND DIVISION.

Harvard District, Common street. - Sallie Bush, Principal; Frances Williamson, Assistant.

THIRD DIVISION.

Bowdoin District, Sharp School. - Serena J. Frye, Principal; Sarah E. Kilmer, Assistant.

Eliot District, 39 North Bennet street. — Mary C. Peabody, Principal; Edith H. Kummer, Assistant. (On Probation.) Isabel G. Dame, Principal. (On Probation.) Ellen M. Murphy, Assistant. (On Probation.)

Hancock District, Cushman School. - Anne L. Page, Principal; E. Louise

Richards, Assistant.

Hancock District, 64 North Margin street. - Anna Spooner, Principal; Phebe A. DeLande, Assistant. (On Probation.) Phillips District, Baldwin School. - Ida A. Noyes, Principal; Hattie M.

Holden, Assistant. (On Probation.)

Wells District, Winchell School. — Ellen Gray, Principal; M. Elizabeth Watson, Assistant.

FOURTH DIVISION.

Brimmer District, Warrenton street. - Lucy H. Symonds, Principal; Etta D. Morse, Assistant.

Prince District, Normal Art School. - Harriet A. Neil, Principal. (On

Probation.)

Quincy District, Hudson street. — Emily B. Stodder, Principal; Mabel S. Apollonio, Assistant.

Winthrop District, Starr King School. - Mary T. Mears, Principal; Adelaide B. Camp, Assistant.

FIFTH DIVISION.

Dwight District, Rutland street. - Emma L. Alter, Principal; Eleanor P. Gay, Assistant.

Franklin District, Cook School. - Lucy Kummer, Assistant.

Hyde District, Ruggles street. - Caroline E. Josselyn, Principal; Alice Howe, Assistant. (On Probation.)

Hyde District, Walpole street. — Caroline E. Carr, Principal; Ada L.

Peabody, Assistant.

SIXTH DIVISION.

Lawrence District, Howe School. - Emilie F. Bethman, Principal; Frances

H. Thompson, Assistant.

Thomas N. Hart District, Thomas N. Hart School. — Frieda M. Bethmann, Principal. (On Probation.) Minnie G. Abbott, Assistant. (On Probation.) Addie L. Bowker, Assistant. (On Probation.)

SEVENTH DIVISION.

Comins District, Cottage-place. — Anna E. Marble, Principal; Annie S. Burpee, Assistant. Smith street. — Caroline D. Aborn, Principal. (On Probation.) Ellen M. Fiske, Assistant. (On Probation.)

Dearborn District, Yeoman street. - Mary T. Hale, Principal; Daisy G.

Dame, Assistant.

George Putnam District. — George Putnam School. — Alice T. Smith, Principal. (On Probation.) Lena P. Stacy, Assistant. (On Probation.) Lewis District. — Quincy street. — Ellen L. Sampson, Principal. (On Probation.) Gertrude A. Raush, Assistant. (On Probation.)

EIGHTH DIVISION.

Bennett District. — Union street. — C. Mabel Rust, Principal. Kate A.

Duncklee, Assistant. (On Probation.)

Hillside District. — Green street. — Angie B. Towne, Principal. (On Probation.) Esther F. McDermott, Assistant. (On Probation.)

NINTH DIVISION.

Mather District. — Field's Corner. — Mary B. Morse, Principal. Probation.)

Minot District. - Neponset. - Jennie B. Brown, Principal.

Stoughton District. — River street. — Alice D. Hall, Assistant. (On Probation.)

HORACE MANN SCHOOL.

FOR TERM ENDING MARCH 31, 1892.

Kate F. Hobart, Assistant.

MANUAL TRAINING SCHOOLS.

FOR TERM ENDING MARCH 31, 1892.

Instructors. — George Smith; Frank M. Leavitt (On Probation.)

Schools of Cookery.

Instructors. - Hattie I. Davis, Annabel G. E. Hope, Josephine Morris (on Probation), Julia M. Murphy (on Probation), Althea W. Somes, Kate C. Winship (On Probation.)

SPECIAL INSTRUCTORS IN MUSIC.

FOR TERM ENDING MARCH 31, 1892.

James M. McLaughlin, Leonard B. Marshall.

INSTRUCTORS IN SEWING.

FOR TERM ENDING MARCH 31, 1892.

Catherine L. Bigelow, Sarah J. Bray, Annie E. Brazer, Harriet E. Browne, Helen L. Burton, Catherine J. Cadogan, Eliza M. Cleary, Susan M. Cousens, Isabella Cumming, Kate A. Doherty, Olive C. Hapgood, Mary E. Jacobs, Margaret A. Kelly, Lizzie S. Kenna, Mary J. McEntyre, Catherine C. Nelson, Sarah H. Norman, Mary E. Patterson, Elizabeth A. Power, M. Elizabeth Robbins, Martha A. Sargent, Julia A. Skilton, Sarah A. Stall, Frances E. Stevens, Lizzie A. Thomas, Emma A. Waterhouse, Mary A. Willis, Ellen M. Wills, Esther L. Young (On Probation.)

SCHOOL DOCUMENT NO. 5-1891.

REPORT AND CATALOGUE

OF THE

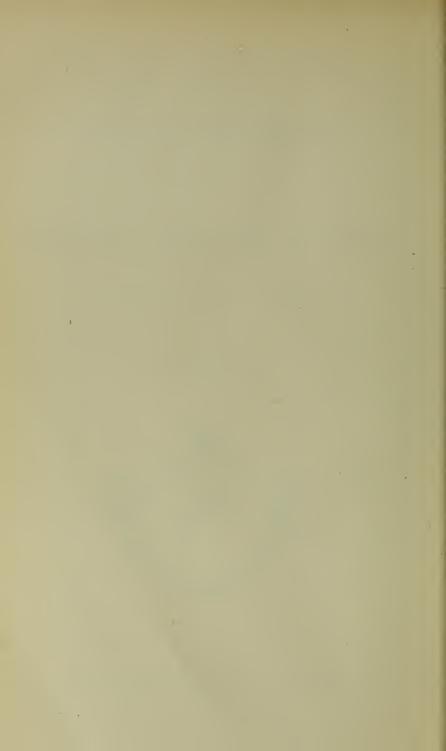
BOSTON NORMAL SCHOOL

FOR THE YEARS

1890-91.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.



REPORT OF THE HEAD MASTER.

To the Committee on the Normal School:—

In accordance with the Regulations of the School Committee, I have the honor of submitting the following report:—

RECENT CHANGES.

For several years the conviction had been growing in my own mind that the professional instruction and training afforded by the city of Boston to those of its daughters who intended to engage in the work of teaching was inadequate, and in the spring of 1888 I submitted the following communication to the Committee on the School:—

Boston, April 17, 1888.

To the Committee on the Normal School: —

Great advance has been made in the special education and training of teachers within the last few years. This is true of both the Old and the New Worlds. When I was in Germany, three years ago, I saw a fine new building in process of erection for the use of a Normal and Training School in the city of Berlin. New York has, within a few years, erected and fully equipped a large building for the exclusive use of its Normal College and Training School.

The number of Normal Schools and Normal departments in other

institutions in the United States, in 1872, when the Boston Normal School was separated from the Girls' High School, was 103. In 1884 the number of such institutions had increased to 255.

In Boston the facilities for professional instruction and training remain substantially as they were sixteen years ago. The course of study and the length of time devoted to the work in the Normal School are the same now as in 1872.

But it seems to me that if we are to maintain our rank in the educational world, and give our children the best educational facilities, we must improve the training of those who are to become our teachers; for the schools will always be just what the teachers make them,—neither better nor worse.

It seems to me, therefore, that the time has come to increase the efficiency of this school by lengthening the course of study. The pupils are now required to attend one year, six weeks of which are spent in observation and practice. I propose that the time of required attendance be increased to a year and a half. My plan is as follows:—

- 1. Let the first half year be spent as at present.
- 2. Let the second half year include two weeks of observation and practice in the primary schools and two weeks of observation and practise in the grammar schools of the city.
- 3. Let the third half year include ten weeks of observation and practice in the public schools.
- 4. Let the pupils be divided into two sections during the third half year, and let the sections visit the schools alternately a month at a time.

If this plan is adopted, each pupil will graduate from the school having had ten weeks of theoretical instruction more than at present, and having had, in all, fourteen weeks of observation and practice in teaching under favorable conditions. Their actual experience in school will be more than three times what it is under the present plan.

I should, therefore, expect these results to follow the execution of the plan proposed:— $\mbox{-}$

- 1. The graduates of the Normal School would be able to do better substitute service on account of their larger experience in school.
- 2. For the same reason, they would be able to do acceptable substitute service in higher grades than at present.
- 3. For a like reason they would be able to begin work, when regularly oppointed, with less friction.
- 4. On account of their greater theoretical knowledge they would ultimately make more intelligent and better teachers.
- 5. A larger proportion of Boston women would be appointed as teachers in our schools; because a larger proportion of the graduates of the Normal School would be the best available candidates.

REPORT. 5

6. In a word, the schools would be benefited by better service, and the Normal pupils benefited by more frequent appointments.

I will only add that the superintendent, and every master with whom I have talked the matter over, have expressed themselves as in full sympathy with the movement.

. Yours respectfully,

LARKIN DUNTON.

In accordance with the suggestion thus offered, the matter was brought before the full Board and carefully considered, and an order was passed lengthening the course of study in the Normal School to a year and a half. This added to the work of the students ten weeks of theoretical study of education and ten weeks of practical experience in teaching. The post-graduate course was continued, but with the modification that those in the post-graduate class who desired might receive instruction in the theory and practice of kindergartening. Accordingly, there are two courses open to post-graduates at the beginning of the fourth half-year, either the regular study of educational theory and practice, or kindergartening.

This action of the committee was followed by the addition, to the authorized corps of teachers, of a sub-master, a second assistant for service in the Normal and Training Schools, a special teacher of drawing, and a special teacher of kindergartening, all of whom were much needed for the efficient administration and instruction of the school.

When the attention of the committee was called to the extra work entailed upon the teachers in the Training School, and the necessity of having this school supplied with the best of teaching talent, an order was passed allowing the employment of an additional first assistant, and of as many second assistants as the committee on the Normal and Training Schools should deem proper; the number of teachers not to be increased. At the same time, the number of pupils to a teacher was reduced to forty-nine, so as to

diminish the strain resulting from teaching under constant observation.

Additional work has been thrown upon the Normal School by the requirement that gymnastics shall be taught in all the schools. We have endeavored to meet this new requirement effectually. Theoretical instruction is now given in this branch throughout the course; and the pupils are thoroughly drilled both in performing and teaching the exercises.

EFFECT OF THESE CHANGES.

Since the changes just enumerated went into operation, two classes have been graduated, one in January, 1890, numbering 97, and one in January, 1891, numbering 65. The wisdom of the changes in the course of instruction is shown in the increased efficiency of the graduates. It is safe to say that no previous class has proved so generally successful as the class of 1890. Their increased efficiency in handling classes, resulting from their larger amount of observation and practice, has been quite marked; while their ability to teach gymnastics is a clear gain over and above the acquirements of any class before. The first class of special students in kindergartening numbered seven. Of these, six have already been appointed in the city, and the seventh would have been appointed but for a mistake which will be soon remedied.

The results in the Training School are already apparent in lightening the work of the teachers, in allowing more time for professional study, and in bringing into the school the best grade of teachers. All this was needed. It requires talent of a high order to illustrate the best methods of teaching, day after day, with learners looking on, and to direct and criticise the teaching of those who are just beginning practice, and to do all this so efficiently that the children will suffer no detriment. And then constant

REPORT. 7

advance must be made by these teachers in the science of education, and they must be in constant touch with the Normal School, in order to exemplify the theoretical instruction there given. The office of a good training teacher is not a sinecure.

ANOTHER ADVANCE.

With the constantly increasing demands made upon teachers, the question of specialization of work is forced upon one's attention. Will it not be wise, at no distant day, to add still another half year to the course, and then allow students, during the last half year, to choose between several specialties? Among these are kindergartening, carpentry, including Sloyd, etc., drawing, sewing, cooking, penmanship, and music. If this course were adopted, it would in time be possible to put into each school some one teacher in almost every department of the required work, who would be specially trained for it; and it would make possible the application of an excellent rule, — to let none but teachers teach.

PROGRAM.

The following table shows how the time of the students is now occupied during the course, and the notes following the table show what is attempted in each subject:—

FIRST TERM.

| Subjects. | Hours per week. | No. of weeks |
|---------------------------------|--------------------|-----------------|
| Psychology | 5 | 20 |
| Physiology and Hygiene | 4 | 16 |
| Arithmetic | 4 | 4 |
| Language, | | |
| Oral Expression and Composition | 3 | 9 |
| Penmanship | 3 | 3 |
| Grammar | 3 | 8 |
| Geography | 4 | 20 |
| Drawing | 2 | 20 |
| Vocal Music | 1 | 20 |
| Gymnastics, | | |
| Theory | 1 | 20 |
| Practice | 12 minutes | daily. |

SECOND TERM.

| Subjects. | Hours per week. | No. of weeks. |
|--|-----------------|---------------|
| Principles of Education | 5 | 16 |
| Language, | | |
| Reading, including Phonics | 4 | 8 |
| Spelling | 4 | 2 |
| Literature | 4 | 4 |
| Grammar | 4 | 2 |
| Arithmetic | 4 | 16 |
| Elementary Science, | | |
| Minerals | 3 | 5 |
| Plants | 3 | 11 |
| Drawing | 2 | 12 |
| Form | 2 | 4 |
| Vocal Music | 1 | 16 |
| Gymnastics, | | |
| Theory | 1 | 16 |
| Practice | 12 minutes | daily. |
| Observation and Practice in the Public Schools | all day, 4'v | veeks. |

THIRD TERM.

| Subjects. | Hours per week. | No. of weeks. |
|--|--------------------|---------------|
| Principles of Education | 5 | 7 |
| Logic | 5 | 3 |
| Language, | 1 | |
| Oral Expression and Composition | 4 | 3 |
| Science of Language | 4 | 4 |
| History | 4 | 3 |
| Arithmetic | 3 | 10 |
| Elementary Science, | | |
| Plants | 4 | 2 |
| Animals | 4 | 6 |
| Color | 4 | 2 |
| Drawing | 1 | 10 |
| Kindergartening | 2 | 10 |
| Gymnastics, | | |
| Theory | 1 | 10 |
| Practice | 12 minutes | daily. |
| Observation and Practice in Public Schools | all day, 10 w | reeks. |

POST-GRADUATE COURSE.

The work of the post-graduate class includes:

- A further study of the principles of education, with special reference to their application in teaching the different subjects of the regular course, and in school discipline;
- 2. The history of education.

NOTES ON THE PROGRAM.

Psychology.

The study of psychology is conducted both from the standpoint of introspection and that of observation. The students are led to know and name their own mental processes, and to interpret the signs of the mental processes of others. The study is not exhaustive, the attention being mainly directed to those phases of mental activity, a knowledge of which will be of most use in the study of the science of education.

Logic.

The aim of the study in this subject is to give the students a knowledge of its terms, to interest them in a further study of the subject, and to give them such a familiarity with the processes of reasoning as will enable them to direct the reasoning of their pupils with more exactness.

Principles of Education.

The study in this department is directed mainly to ascertaining those necessary sequences in different kinds of mental action, which will serve as guides to the teacher in directing the work of children. These sequences constitute the principles in accordance with which all sound educational processes must be conducted. Their application is shown by constant reference to proper methods of instruction and discipline.

Physiology.

The purpose of the work in physiology and school hygiene is twofold; first, to give the Normal students a practical knowledge of the laws of health, based upon a knowledge of anatomy and physiology, in order that they may know the means of preserving their own health and that of the children whom they are to teach; second, to prepare them to give elementary instruction in physiology to pupils in primary and grammar schools.

Language.

The purpose of the work on the English language is to prepare the Normal students, first, to teach children to speak, read, and write their mother tongue with accuracy and facility; second, to awaken in them a love and appreciation of literature. In order to accomplish this object, the pupils are led to understand the principles which should guide them in the development of power in the departments of the work enumerated in the program, and to apply these principles in giving illustrative lessons.

Arithmetic.

The course in arithmetic is intended to develop power in analyzing and arranging the subject-matter to be taught, and in discovering and applying methods adapted to its clear presentation. Each pupil is required to do this work of analysis, arrangement of the subject, and teaching of lessons to the class, under the direction and criticism of the teacher. The instruction covers the whole range of the subject, both elementary and advanced. Incidentally, the student's knowledge of arithmetic is made broader, clearer, and more accurate, although the chief purpose of the work is to show the application of the principles of teaching to this subject.

Geography.

The work in geography is designed to develop in the Normal pupils the ability to apply the principles of education to the teaching of this subject. They are taught to observe carefully the natural objects around them; they are taught to use the elements gained by direct observation in picturing scenes in distant lands; they are taught to reason from cause to effect in their observation the phenomena of nature, and from their knowledge of their own surroundings to infer conditions in other places. Thus, by their own experience, they learn the methods of directing the work of others.

History.

The purpose of the work in history is to equip pupils for teaching the subject. The work includes, first, a study of the nature of history, and the principles which should guide in teaching it; and, second, practice in giving illustrative lessons.

Elementary Science.

The main object in all the branches of elementary science is to give the pupils of the Normal School the power of so presenting each subject that the children will observe the various objects to be studied; will see their likenesses and differences so as to make simple classifications; and, through their knowledge of the relations of these various objects to each other, will see the unity and beauty of the world.

Drawing.

The following course of instruction in drawing, for the students in this school, has been prepared by the director of drawing, and is closely followed. The object of the course is twofold; first, to prepare the students to teach all

REPORT. 13

the branches of this subject that are studied in the primary and grammar schools; and second, to give them the power to illustrate any subject that may need illustration, with sketches made upon the blackboard with chalk.

DRAWING PROGRAM FOR THE NORMAL SCHOOL.

The instruction in this subject is to be largely "normal." The students are required to make copious notes and illustrate them with sketches. The course of instruction should be presented in the order of its arrangement as given below, and the amount of time given to each subject should be also governed by this program.

Geometric Drawing. — Time 3 hours.

The instruction includes the best methods of presenting this subject, both in its relation to the other departments of drawing, and as a separate study: (1) How to handle compasses, straight-edges, pencils, etc; (2) The selection of problems useful to scholars; and (3) The system of notation used, and the reason why it should be insisted upon.

Historic Ornament. — Time, 5 hours.

Here the students are taught the methods of studying this subject from illustrations (to be made by the teacher) of three or more schools of ornament, and the use of these illustrations for observation lessons introductory to the subjects of decoration, and the technique of elementary design.

Geometric Decoration. — Time, 2 hours.

The methods of construction to be used in decorations of this kind are:
(1) Those purely geometric; (2) Those based on the great law of growth in plants.

Elementary Design. — Time, 10 hours.

Here are taught the principles of decoration, which are based upon the laws of growth in plants, and their application to the various kinds of decoration; (1) Horizontal radiation, or repetition around a point or central stem; (2) Vertical radiation, or growth from a point or central root; (3) Vertical growth, opposite or alternate, from an upright line or stem; (4) Growth or movement of trailing or climbing plants, both on vertical and horizontal surfaces.

The following ground is to be covered: natural or pictorial treatment contrasted with conventional treatment; the reasons why the latter

should be used in decoration; the treatment of stems and the number of planes to be suggested in elementary design; geometric construction and division of surfaces to be decorated; construction of the decoration, which must be based upon the laws of growth; conventionalization,—repetition, alternation, symmetry, balance, harmony, variety, unity.

Constructive or Working Drawing. — Time, 6 hours.

The study of this subject includes: (1) How to make free-hand working drawings from geometric solids, and from common objects; (2) How to make working drawings from geometric solids and from common objects by the use of instruments; (3) How to figure the dimensions on all working drawings.

Model and Object Drawing, and Practical Perspective. Time, 16 hours.

This branch of the instruction includes: (1) Observation from solids of the actual direction of lines, or rather of edges which are to be represented by lines; (2) Observation from solids of the apparent direction of retreating lines; (3) Observation from solids of the relative length of lines, both actual and apparent; (4) Observation of the actual forms of surfaces; (5) Observation of the apparent forms of surfaces as seen from different points of view; (6) Observation of the actual proportions and of the true positions of surfaces in their relation to one another; (7) Observation of the apparent forms of surfaces in their relation to one another, when seen from various points of view; (8) Observation leading to the best methods of accurate representation in model and object drawing; (9) Observation leading to the best use of diagonals and diameters of a given surface, or any representation thereof, for the purpose of finding either the actual or apparent positions of certain points upon that surface.

Illustrative Drawing. - Time, 18 hours.

This work includes methods and practice in drawing illustrations upon the blackboard in connection with the teaching of various subjects, such as geography, plants, animals, etc.

Form.

The principal object in the study of form is to prepare the students to teach modelling in clay, paper-folding, etc., so as to lay the foundation for drawing as based upon the observation of the form to be drawn.

Color.

In this department the Normal pupils are qualified to direct the observation of children so as to give them the knowledge of common colors, together with their most important harmonies and contrasts:

Vocal Music.

This department is under the direction of Mr. H. E. Holt, one of the special teachers in music. It is the aim to qualify the students to direct children in the study, first, of musical sounds themselves, and, secondly, of the proper mode of representing music. Music itself is made the chief object of study, the study of signs being confined to those needed to express the child's knowledge of the music.

Gymnastics.

Special training in gymnastics has been given since the beginning of the school year in 1889. The plan of the work is as follows: The whole school receives a course of lectures, one hour a week, during the whole course, on the theory of the subject. These lectures are given by Dr. Claes J. Enebuske, and include a careful treatment of the physiology and anatomy of the human body upon which the exercises are based. The entering class is divided into sections of from twelve to fifteen each; and these sections are given a systematic drill in the exercises, throughout the first year, for twelve minutes each day. The graduating class is divided into groups of four, and each member in turn is placed in charge of one section of the entering class for a week at a time, the other three acting as assistants. This work is directed and criticised by one of the regular teachers in the Normal School.

This course secures for every pupil in the school: (1) a study of the theory, one hour per week, for a year and a

half; (2) a carefully arranged daily drill in the exercises, for one year; and (3) ten weeks' practice as leader and critic.

Culture of the Students.

From the foregoing sketch of the aims of the different branches of study pursued in the Normal School it might be inferred that the sole purpose of the school is to make its students acquainted with the science of education and with those methods of instruction and discipline which this science demands. This, however, would be a wrong inference. Several other results usually follow.

In the first place, the students' knowledge of the branches taught in the primary and grammar schools is materially broadened and deepened. Most of these branches have not been studied at all since the students were in the lower schools themselves. Here they are taken up again and analyzed into their elementary stages, and these stages arranged in their necessary orders of dependence. This work not only requires a recall of what had been formerly learned, but often new facts must be added; and more than this, it demands that the students shall see the entire subjects in all their elements and relations. This is knowledge too deep for the child, but essential for the teacher who aspires to be a true educator. The development of the power of rigid analysis and logical arrangement is one of the chief incidental aims of the school.

While the aim of the Normal School is more particularly to fit its students to teach in Grammar and Primary Schools and in Kindergartens, yet much is done toward fitting them for High School work. Many of the High School studies are brought more or less under consideration, so that our students obtain a deeper insight into them than is possible while studying them for the first time. The Normal pupils learn to look at all subjects from the standpoint of the

teacher, and this involves, in addition to a knowledge of the subject itself, a comprehension of its genesis and the necessary dependence of its parts one upon another. So the pupils go out of the Normal School with a profounder knowledge of many of the High School subjects, with an intenser literary spirit, and with a deeper love for scientific pursuits.

Another reflex effect upon the students is what may be called enthusiasm. Their views of the various ways in which it is possible for others to be helped in the acquisition of knowledge and the formation of character are constantly broadening. The possibility of self-development is ever becoming clearer. Consequently, the duty of self-improvement and of devotion to the good of others is made ever more apparent. Thus narrowness and selfishness are made to yield to catholicity of view and feeling, till the desire to become and to do the best is the prevailing sentiment. Nowhere more than in a good Normal school is devotion to duty created.

Finally, we try to infuse into the students of the Normal-School a spirit of docility. This puts them in the right relation to criticism. When they begin their work as assistants, they believe it to be their duty to assist. They feel themselves to be learners and not critics. They regard kindly criticism as friendly advice, which they are bound to heed, and for which they should be profoundly grateful. This accounts, in part, for the rapid professional progress for which Normal graduates are noted.

Observation and Practice.

During the first half year the Normal pupils have frequent opportunity to see the work of instruction as it is carried on in the Training School. When the methods of teaching any subject, as reading, are under consideration in the Normal School, the pupils are taken to the Training School classes

for a practical demonstration of what they are studying. Thus they have an opportunity to see the methods of teaching which they study in the Normal School applied in the Training School. Their practice work the first term is confined to teaching their classmates. The object in this is to make them somewhat familiar with the orderly presentation of subjects, and with the proper sequence of questions in teaching.

During the second half year the Normal pupils spend two whole weeks in primary schools, and two in grammar schools. They are assigned to all the classes in the Training School, and to as many classes in the other public schools of the city as are needed for this purpose, only one pupil being assigned to a class. These classes remain in charge of the regular teachers. The Normal students generally give two or three short lessons daily, under the direction and subject to the criticism of the teachers in charge. The teachers of the Normal School visit the pupils several times during their stay, both in the primary and grammar schools, for purposes of criticism and instruction.

During the third half year the observation and practice are continued, under substantially the same conditions, for ten weeks. This time is broken into periods of four weeks each, alternating with equal periods of theoretical instruction in the Normal Schools, only one-half of the class being absent from the school at a time.

Post-graduate Class.

Usually from half to two-thirds of the graduates join this class; so that the number actually present at the Normal School remains about the same during the first part of the second term as it is during the first term. This gives an opportunity to do some excellent work. The calling-off of the class for substitute service begins at once. Substi-

REPORT. 19

tuting proves to be an excellent training for permanent service. It not infrequently happens that beginners make mistakes when they first take charge of classes that they can avoid with the next classes. In such cases the sooner they take charge of new classes the better. Many a young teacher, who would utterly fail at first if put in charge of a difficult class, gains sufficient power by a few months' experience in general substituting to insure success in almost any grade.

THE PHILBRICK LIBRARY.

Mrs. Mary Hemenway has presented to the Normal School the pedagogical library of the late Dr. John D. Philbrick. This generous gift will prove of incalculable benefit to both teachers and pupils. No student need now go out from the school without a knowledge of the existence of a body of literature devoted to her special profession. The committee have wisely made provision for an annual increase of the library. This is needed in order to add the professional works that are now constantly issued from the press.

ADDITIONAL ACCOMMODATION.

With the general growth of the city comes the gradual increase in the number of pupils in the Normal classes. This, together with the lengthening of the course of study, has created an imperative need for more room for the Normal School. About fourteen years ago, when provision was made for the school in the hall of the Rice Grammar School building, I told the committee that, in my opinion, we should be fairly well accommodated there for the next ten years. We were; but for several years past we have been uncomfortably crowded. The school numbers nearly two hundred, and the only rooms for study and recitation that we can call our own are the large hall and two small lecture-

rooms. From one to four lessons are conducted daily in the hall at the same time, and both corridors are used for the same purpose, and even the small teachers' room. We have no drawing-room, no laboratory, and no gymnasium. The efficiency of the Training School would be greatly increased by the addition of several small rooms for practice work by the Normal students.

Fortunately, provision can be made for this additional amount of room at a small expense. The buildings of the primary and grammar departments are nearly ninety feet apart, and are so situated that they can readily be united by a building forty feet wide. If this addition were made, it would give us six or eight additional rooms, and would enable us to occupy several vacant rooms in the third story of the Appleton-street building. The means of relief here suggested require the purchase of no additional land, as the proposed building would occupy a portion of the land now used for yards.

If these improvements are made, I see no reason why the school would not be fairly well accommodated for the next twenty years at least, and perhaps for a much longer time. I trust immediate action will be taken in the matter.

CONCLUSION.

The last year has been one of unusual prosperity in the school. For this I owe my hearty thanks to the Committee on the School for their generous support and coöperation, and to the teachers, both of the Normal and Training Schools, for their faithful and efficient service. I am especially indebted to Mr. Delwin A. Hamlin, principal of the Training School, for his intelligent, laborious, and hearty assistance, both in organization and instruction.

Very respectfully yours,

LARKIN DUNTON.

CATALOGUE

OF THE

BOSTON NORMAL SCHOOL

FOR THE YEARS

1890-91.

SCHOOL COMMITTEE.

1891.

Term expires January, 1892.

SOLOMON SCHINDLER, LALIAH B. PINGREE, SAMUEL B. CAPEN, J. P. C. WINSHIP,

LIBERTY D. PACKARD, THOMAS J. EMERY, RICHARD C. HUMPHREYS, WILLARD S. ALLEN.

Term expires January, 1893.

STILLMAN B. ALLEN, CHARLES T. GALLAGHER,
CAROLINE E. HASTINGS,
BENJAMIN B. WHITTEMORE,
CHARLES E. DANIELS.

FRED G. PETTIGROVE,

Term expires January, 1894.

EMILY A. FIFIELD, CHARLES M. GREEN, WILLIAM A. MOWRY,

JAMES S. MURPHY, Russell D. Elliott, James A. McDonald, WILLIAM A. DUNN, CHOATE BURNHAM.

COMMITTEE ON THE NORMAL SCHOOL,

WILLIAM A. MOWRY, Chairman. MRS. EMILY A. FIFIELD, Secretary. STILLMAN B. ALLEN, J. P. C. WINSHIP, MISS LALIAH B. PINGREE.

BOSTON NORMAL SCHOOL.

LARKIN DUNTON, HEAD-MASTER, 16 ASHFORD St., ALLSTON, MASS.

Wallace C. Boyden, Sub-Mas'er.
L. Theresa Moses, First Assistant.
Annie E. Chace, Second Assistant.
Katherine H. Shute, Second Assistant.
Dora Williams, Second Assistant.
V. Colonna Murray, Second Assistant.
W. Bertha Hintz, Teacher of Drawing.
Laura Fisher, Teacher of Kindergartening.
Hosea E. Holt, Teacher of Music.
Henry Hitchings, Director of Drawing.

RICE TRAINING SCHOOL.

DELWIN A. HAMLIN, PRINCIPAL.

GRAMMAR DEPARTMENT.

Charles F. Kimball, Sub-Master. Joseph L. Caverly, Sub-Master. Florence Marshall, First Assistant.

Second Assistants.

ALMIRA I. WILSON, DORA BROWN, MABEL L. WARNER, ELLA T. GOULD, MIRIAM W. DIKE, BESSIE H. CHAPIN.

Third Assistants.

ELIZA Cox,

MATTIE H. JACKSON.

PRIMARY DEPARTMENT.

GERTRUDE E. BIGELOW, First Assistant.

Second Assistants.

MABEL I. EMERSON,

MARY C. MELLYN.

Third Assistants.

GRACE HOOPER, EMMA L. WYMAN, SARAH E. BOWERS, CLARA C. DUNN.

KINDERGARTEN DEPARTMENT.

Mabel Hooper, Principal. Ada C. Williamson, Assistant.

REGULATIONS OF THE BOSTON NORMAL SCHOOL.

ADOPTED BY THE SCHOOL BOARD.

Section 1. The Boston Normal School is established for the purpose of giving professional instruction to young women who intend to become teachers in the public schools of Boston. The course of study in this school shall be for a year and a half, and shall be divided into three terms of five months each.

SECT. 2. The instructors in this school shall be a head master, sub-master, and first and second assistants. The head-master shall be a graduate of a college in good standing. He shall have a sub-master, a first assistant, and as many second assistants as may be necessary, provided the whole number of teachers, exclusive of the head-master, shall not exceed one for every thirty pupils. An additional instructor may be elected for an excess of twenty pupils, and one may be removed for a deficiency of twenty. In addition to the instructors already provided for in this section, there shall be a second assistant for service in the Normal and Training Schools, a second assistant for service in the Normal School and Normal Kindergarten, and a special teacher of drawing and blackboard illustration. The instructors in the Training School shall be a master, two sub-masters, two first assistants, and as many second and third assistants as may be necessary, - the committee in charge to determine the number of second and third assistants, - provided that the whole number of instructors, exclusive of the master, shall not exceed one for every forty-nine pupils. An additional instructor may be elected for an excess of twenty-five pupils, and one may be removed for a deficiency of twenty-five. An additional instructor, with the rank of second or third assistant, as the committee in charge shall determine, may be elected for an ungraded class.

SECT. 3. The salaries of sub-master and first and second assistants shall be established at a minimum rate for the first year of service, with an annual increase during the succeeding five years, so that the maximum salary shall be reached for the sixth and each subsequent year of service. The committee in charge may recommend, and the Committee on Nominations, if they doem it

advisable, may nominate, an instructor in the Normal School, whose term of service shall begin with the salary of any year after the first, except the last, in the series of years for the grade, and the salary of any such instructor, if the nomination be confirmed, shall be annually increased in the same manner as if the candidate had served during the preceding years of such term.

- SECT. 4. Candidates for admission must be at least eighteen years of age, unless an exception is made by a special vote of the committee in charge, and must be recommended for admission by the master or committee of the last school they attended. Those who have completed the fourth year of the High School course will be admitted without examination. Other candidates must show to the Board of Supervisors, conjointly with the head-master, both by examination and recommendation, that they are qualified. All pupils shall be put on probation, and, as soon as, in the opinion of the Board of Supervisors and the head-master, they prove unsuitable for this School, shall be discharged by the Committee on the School, if they deem proper.
- Sect. 5. "The Board of Supervisors, conjointly with the head-master, shall examine the pupils in the Normal School, make promotions from class to class, and, at the close of the course, submit the results of their examinations and the rank of the pupils, together with their own recommendations, to the Committee on Examinations, who shall award the diplomas. Questions for the diploma examinations in the Normal School shall be adopted by the Board of Supervisors, and approved by the Committee on Examinations. Pupils who fail of promotion or graduation at the close of any term may join the following class; but no pupil shall repeat the work of any term more than once.
 - SECT. 6. A diploma of graduation from the Normal School, issued after the year 1872, shall entitle the holder to receive a fourth-grade certificate of qualification. When teachers are to be employed in the public schools, graduates of this school shall have the preference, other things being equal.
 - SECT. 7. The text-books used in this school shall be such of the text-books used in the other public schools of the city as are needed for the course of study, and such others as shall be authorized by the Board.

- SECT. 8. This school shall begin on the Thursday following the first Wednesday in September, and shall close on such day of the week preceding the Fourth of July as the Committee on the School may direct.
- SECT. 9. The head-master shall annually make a report to the committee in charge, which, under their direction, shall, in whole or in part, be printed, with a catalogue of the school, and be sent to the members of the School Committee and of the Board of Supervisors, the principals of the schools, and the members of the graduating classes of High Schools.
- SECT. 10. When a graduate of this school is appointed as teacher in any public school of this city it shall be the duty of the head-master to make, or cause to be made by his assistants, one or more visits to her school, for the purpose of criticism and suggestion in regard to her teaching.
- SECT. 11. Such instruction shall be given, in connection with the Normal School, to teachers in the employ of the city as the committee in charge may direct. Special instruction in music and drawing shall be given in this school under the direction of the committees on these departments.
- SECT. 12. The head-master shall send the Normal pupils into the public schools for observation and practice in teaching, under his direction, four weeks during the second term and ten weeks during the third term; and he may send them, under proper guidance, to study the Museums of Natural History and Fine Arts, and important manufacturing industries. Principals of schools in which the Normal pupils observe and practise shall report to the head-master, in writing, their opinion of the teaching and governing ability of such pupils.
- SECT. 13. There shall be a post-graduate course of one year in this school, for the further study of the principles of education and methods of instruction, and for observation and practice in teaching; and pupils attending this course may be employed as substitutes or temporary teachers, or appointed as permanent teachers. Regular instruction shall be provided for the pupils of the post-graduate class for one term only; but they may attend the instruction given in the other classes for the rest of the year.

- Sect. 14. The course of study in this school is all pursued with special reference to teaching, and is as follows:—
 - 1. Psychology and Logic.
 - 2. Principles of Education.
 - 3. Methods of Instruction and Discipline.
 - 4. Physiology and Hygiene.
 - 5. The Studies of the Primary and Grammar Schools.
 - 6. Observation and Practice in the Training School.
 - 7. Observation and Practice in the other Public Schools.
 - 8. Science of Language.
 - 9. Phonics.
 - 10. Gymnastics.
 - 11. Vocal Music.
 - 12. Drawing and Blackboard Illustration.
- 13. Special study of the Theory and Practice of the Kindergarten, for those members of the post-graduate class who desire to qualify themselves for teaching in that department.

TRAINING DEPARTMENT.

- SECT. 15. The Rice Training School is intended to give the pupils of the Normal School a practical knowledge of the methods of instruction and discipline in the public schools of Boston.
- SECT. 16. The Committee on the Normal School shall have charge of the Training School.
- SECT. 17. The head-master of the Normal School shall have the direction of the observation, practice, and methods of instruction in the Training School, subject to the approval of the committee in charge.
- SECT. 18. The principal of the Training School shall perform, in that school, the usual duties of master of a grammar school, and such duties in connection with the Normal School as the committee in charge may direct.
- SECT. 19. The course of study in the Training School shall be the same as in the grammar and primary schools of the city.
- Sect. 20. The instructors in the Normal School shall perform such service in the Training School as the head-master may direct.

TRAINING SCHOOL.

In 1876 the Rice District was constituted a Training School, where the Normal pupils have an opportunity of gaining, by observation and practice, a familiar acquaintance with the discipline and instruction of the Boston schools. The Training School contains eleven grammar and seven primary classes, numbering about a thousand pupils.

LOCATION.

The Normal School occupies the upper floor of the school-house on Dartmouth street; and the Training School the first and second floors of that building, and also the school-house on Appleton street.

CONDITIONS OF ADMISSION.

A certificate that a candidate has completed the fourth year of the High School course is accepted as proof of qualification for admission. The course of study in the Boston High Schools embraces the following subjects: Composition; Rhetoric; English Literature; Ancient, Mediæval, and Modern History; Civil Government; Botany; Zoölogy; Anatomy and Physiology; Chemistry; Physics; Astronomy; Arithmetic, including the Metric System; Algebra; Geometry; Plane Trigonometry; Latin, or French, or German; Vocal Music; and Drawing. Candidates who have not completed the fourth year of the Boston High School course will be examined on this or its equivalent. An examination of such candidates will be held at the school-house, on Dartmouth street, the Tuesday preceding the first Wednesday in September, at 9 o'clock A.M. Those who have completed the fourth year of the Boston High School course will present themselves with their diplomas on the following Thursday.

TUITION.

The rule of the School Board in regard to the payment of tuition by non-resident pupils, applicable to the Normal School as well as the other public schools of the city, is as follows:—

"All children living in the city, who are upwards of five years of age, and are not disqualified by non-compliance with the regulations of the Board, shall be entitled to attend the public schools; but neither a non-resident pupil, nor one who has only a temporary residence in the city, shall be allowed to enter or to remain in any school, unless the parent, guardian; or some other responsible person has signed an agreement to pay the tuition of such scholar, or until a certified copy of a vote of the Committee on Accounts, permitting such scholar to attend the school, has been transmitted to the principal." The tuition is usually about seventy-five dollars a year.

NECESSITY FOR ATTENDANCE.

The following extracts from the Regulations of the Public Schools of the City of Boston will show the relation of the Normal School to the work of teaching in Boston:—

- "The Board of Supervisors shall not admit to an examination [of applicants for situations as teachers] any person who is not a graduate of the Boston Normal School or of one of the State Normal Schools, unless such person has had at least one year's experience in teaching school."
- "The Board of Supervisors shall grant certificates of qualification for the several grades, after examination, to such candidates as they shall consider entitled to them, as follows:—
- "First Grade. To head-masters, masters, and junior-masters of the Normal and High Schools, and principals of Evening High Schools.
- "Second Grade. To masters and sub-masters of Grammar Schools, principals of Evening Elementary Schools, and assistants of High Schools.
- "Third Grade. To assistant principals and assistants of the Normal and High Schools.
- · "Fourth Grade. To assistants of Grammar, Primary, and Evening Elementary Schools.
- "Special Grade. To instructors in special studies, and in Schools for the Deaf, Manual Training Schools, and Kindergartens.

"No instructor shall be employed in any higher grade of schools than that for which the certificates shall qualify the holder thereof; and no instructor whose certificate is not recorded in the office of the Committee on Accounts shall be entitled to draw any salary as a teacher or as a substitute; and the Auditing Clerk shall not allow the name of any such teacher or substitute to be entered or to remain on the pay-rolls."

VACATIONS.

The following holidays and vacations are granted to the school, viz.: every Saturday; the first Monday in September; the half day before Thanksgiving day, and the remainder of the week; one week commencing with Christmas day; New Year's day; the twenty-second of February; Good-Friday; Fast day; the week immediately preceding the second Monday in April; Decoration day; the seventeenth of June; and from the close of the school, the week preceding the Fourth of July, to the Thursday following the first Wednesday in September.

TIME OF ADMISSION.

Only one class is admitted to this school during the year, and that is admitted at the beginning of the school year. Pupils are not received at other times. The work of the school is so conducted that it is impossible for pupils to make up lessons lost at the beginning of the term, so that it is necessary for all who desire to enter during the year to be present at the opening of the school in September.

The post-graduate class will be organized the first day of the term beginning in September, at three o'clock in the afternoon.

GRADUATES

OF THE

BOSTON NORMAL SCHOOL.

CLASS OF 1890.

B., Brighton; C., Charlestown; D., Dorchester; J.P., Jamaica Plain; R., Roxbury; S.B., South Boston; W.R., West Roxbury; E.B., East Boston; A., Allston.

Residence.

. 30 Cary Street, R.

Name.

Anslow, Keziah J.

| Auston, McZian o | or dary sorece, in. |
|------------------------|---------------------------------|
| Bamber, Bertha | 8 Auburn Street, R. |
| Barry, Ethel M | 25 Alpine Street, R. |
| Bernhard, Mary E | 415 Fourth Street, S.B. |
| Bourne, Lilian S | 1112 Adams Street, D. |
| Brick, Mary H | Percival Avenue, D. |
| Burgess, Louisa W | 72 Fuller Street, D. |
| Christiernin, Hattie R | 230 Bennington Street, E.B. |
| Clark, Anna W | 573 Dudley Street, D. |
| Cottrell, Hattie I | 118 Blue Hill Avenue, R. |
| Crosswell, Emily L | The Rand, 76 W. Rutland Sq. |
| Daily, Elizabeth E | 40 Lawrence Street. |
| Davis, Isabel W | 116 Ziegler Street, R. |
| Deane, Christine | 40 South Russell Street. |
| DeLande, Phebe A | 12 Washington Street, C. |
| Dolan, Annie R | 4 Lathrop Place. |
| Dowd, Elizabeth G | 12 Madison Street, R. |
| Driscoll, Annie M | Cor. Harold & Homestead sts. R. |
| Dundon, Susan T | 42 Mystic Street, C. |
| | |

| AT. | | 5 |
|--------------------------|---|-----------------------------------|
| Name. Durgin, Nellie M | | Residence. 604 West Cedar Street. |
| Durham, Helen W | | 18 Harris Avenue, J.P. |
| Ellis, Mary G | | Bellevue Street, D. |
| Evans, Emily A | | *10 = - = - |
| Field, Hattie D | • | Melrose, Mass. |
| Finneran, Mary F | | 9 Downer Street, R. |
| Fitts, Ada M | | 12 Mudison Square Hotel, Ster- |
| 11000, 12000 121 | | ling Street. |
| Fitzgerald, Ella G | | 218 Athens Street, S.B. |
| Fitzgerald, Etta G | | 33 Northfield Street. |
| Flynn, Margaret C | | 9 Warren Place, R. |
| Fraser, Catharine W | | 195 Salem Street. |
| Gormley, Mary V | | 1 Worthington Street. |
| Greenlaw, Josephine W | | 5 Willoughby Fluce, R. |
| Hallahan, Agnes J | • | 14 Midland St., Savin Hill, D. |
| Hayward, Callie H | | Melrose Highlands. |
| Hinds, Clara G | | 440 Fourth Street, S.B. |
| Hodges, Gertrude L | | 85 Revere Street. |
| Hodgkins, Mabel E | | 5 Indiana Street. |
| Hough, Elizabeth E | | 226 Marlboro' Street. |
| Hunt, Margaret C | | Linden Street, A. |
| Jacobs, Blanche S | | Melrose Highlands. |
| Jameson, S. Janet | • | 18 Tremont Street, C. |
| Kean, Gertrude D | | 280 West Fifth Street, S.B. |
| Keyes, Mary E | | 7 Cottage Place. |
| Laughton, Mary Shepard . | | 126 K Street, S.B. |
| Leary, Julia G | | 936 Broadway, S.B. |
| Leen, Celia V | | 28 Charter Street. |
| Litchfield, Ada M | ٠ | 15½ Shepard St., Cambridge. |
| Lyons, Sarah A | • | Dedham, Mass. |
| Mac Rae, Lillian J | • | 8 Georgia Street, R. |
| Maguire, Eliza A | • | 33 Auburn Street, C. |
| Mann, Elizabeth M | • | 14 Greenough Ave., Cambridge. |
| McCarty, Mary E | | 897 Albany Street. |
| McDermott, Esther F | | 6 Quincy Street, C. |
| McGowan, Martha C | | 3 Smith-street Place, R. |
| McIntire, Mary E | | 492 Parker Street, R. |

| Name. | | Residence. |
|----------------------------|-----|--------------------------------|
| McWilliams, Annie E | ٠. | 12 Lawrence Street. |
| Meaney, Mary E | | Cypress Street, Brookline. |
| Mellyn, Mary C | | , |
| Miller, Bertha E | | 10 Virginia Street, D. |
| Mitchell, Ida M | | . 355 Columbus Avenue. |
| Morris, Eva C | | 561 East Eighth Street, S.B. |
| Murphy, Ellen M | | 297 Bunker Hill Street, C. |
| Murray, M. Josephine | | 25 Sharon Street. |
| Neville, Anne | | 52 Winship Street, B. |
| Niland, Annie M | | Byron St., Harbor View, E.B. |
| Noonan, J. Adelaide | | 160 K Street, S.B. |
| O'Brien, Annie J | | 56 Northampton Street. |
| Paine, Jessie G | | 2 Laurel Street, C. |
| Palmer, Mary E | | 376 Dudley Street, R. |
| Paul, Fannie J | | 12 Chestnut Street, C. |
| Peirce, Grace S | | 104 Appleton Street. |
| Polk, Mary | | Houghton Street, D. |
| Pond, Florence C | | Chipman Street, D. |
| Poole, Caroline N | | 3607 Washington Street, Forest |
| | | Hills. |
| Ray, Lottie G | | 247 Lexington Street, E.B. · |
| Regan, Katharine A | | 49 Winchester Street. |
| Regan, Mary N | | 49 Winchester Street. |
| Richardson, Laura E | | 13 Laurel Street, R. |
| Scollin, Ellen A | | 494 Parker Street, R. |
| Seidensticker, Josephine A | | 112 Thornton Street, R. |
| Shea, Elizabeth G | | 316 Albany Street. |
| Simmons, Mary F | | Wollaston, Mass. |
| Spaulding, Mabel F | • 1 | 504 Fourth Street, S.B. |
| Sprague, Gertude D | | 7 Douglas St., Cambridgeport. |
| Stacy, Lena P | | 15 Highland Ave., Somerville. |
| Sweeney, Margaret J | | 696 Huntington Avenue. |
| Thompson, Ella L | | 372 Bunker Hill Street, C. |
| Thompson, Jessie E. H | | 20 Worcester Street. |
| Tishler, Lillian | | 18 Windsor Street, R. |
| Uihlein, Nellie L. P | | 12 Mystic Street, C. |
| Wald, Emma L | | 31 Green Street, C. |

| Name. West, Emma F | ie. |
|----------------------|-----|
| CLASS OF 1891. | |
| Andrews, Elizabeth J | |

| Name. | Residence. |
|-------------------------|--------------------------------|
| Foster, Ellen E | |
| Fruean, Mary H | TT 1 A O: M TO : O: TO |
| Green, Mary L | 16 Marcella Street, R. |
| Greene, Lillian G | |
| Hall, Lillian M | |
| Hannon, Anna P | 200 35 4 O. O |
| Henchey, Elizabeth E | 51 Baldwin Street, C. |
| Herlihy, Helena G | 32 Winthrop Street, C. |
| Johnston, Roxana L | |
| Keenan, Joanna G | 3 Pickering Avenue, R. |
| Kelly, Sabina F | 44 Sawyer Avenue, D. |
| Lakin, Gertrude H | 353 Dudley Street, R. |
| Lathrop, Floy | 777 1.7 |
| Leach, Anna M | 76 Circuit Street, R. |
| Lincoln, C. Emma | Washington Street, Roslindale. |
| Lindsay, Mary F | 15 Old Harbor Place, S.B. |
| Lynch, Annie V | 92 Hyde Park Avenue, J.P. |
| Macdonald, Emily H | 5 Pleasant Street. |
| Maguire, Annie A | 34 Sherman Street, R. |
| McMahon, Annie M | South Street, Randolph. |
| Merrick, Mary L | 671 Washington Street, D. |
| Mooney, Mary F | Selden Street, D. |
| Mudge, Cora B | Chestnut Place, J.P. |
| Mulcahey, Annie M | 866 Fifth Street, S.B. |
| O'Brien, Elizabeth T | 22 Chestnut Street, C. |
| Ordway, Julia K | 766 Dudley Street, D. |
| Plummer, Lillian G | 91 Putnam Street, E.B. |
| Reed, Annie J | 438 Broadway, Somerville. |
| Reinhard, Alice L | 149 Bowdoin Street, D. |
| Rendall, Lena M | 15 Oakland Street, Medford. |
| Rich, Florence H | U Company |
| Richardson, Elizabeth M | 13 Laurel Street, R. |
| Rock, Rosanna L | 567 Warren Street, R. |
| Spaulding, Elizabeth A | 38 Saunders Street, A. |
| Stone, Annie F. S | |
| Travis, Ede F | 51 Chestnut Hill Avenue, B. |
| Tufts, Alice | 21 Oak Street, C. |

IN SCHOOL COMMITTEE, BOSTON, June 10, 1890.

Ordered, That the Committee on the Revision of the Courses of Study be authorized to report the revised courses of study in print.

Attest:

PHINEAS BATES,

Secretary.

IN SCHOOL COMMITTEE, BOSTON, March 10, 1891. Adopted to take effect Sept. 1, 1891.

Attest:

PHINEAS BATES,

Secretary.

COURSE OF STUDY

FOR THE

GRAMMAR SCHOOLS.

1891.



MORAL TRAINING.

OPENING EXERCISE, & hour a week.

Note 1: Teachers are directed to give instruction for a few minutes in good manners and good morals at the opening of school in the morning and at other favorable opportunities. In giving this instruction, teachers should keep strictly within the bounds of manners and morals, and thus avoid all occasions for treating of or alluding to sectarian subjects.

NOTE 2: "It shall be the duty . . . of all preceptors and teachers of academies, and of all other instructors of youth, to exert their best endeavors to impress on the minds of children and youth committed to their care and instruction, the principles of piety and justice and a sacred regard to truth; love of their country, humanity, and universal benevolence; sobriety, industry, frugality; chastity, moderation, and temperance; and those other virtues which are the ornament of human society, and the basis upon which a republican constitution is founded: and it shall be the duty of such instructors to endeavor to lead their pupils, as their ages and capacities will admit, into a clear understanding of the tendency of the above-mentioned virtues, to preserve and perfect a republican constitution and secure the blessings of liberty, as well as to promote their future happiness; and also to point out to them the evil tendency of the opposite vices." - General Statutes of the State of Massachusetts, Chapter 38, Section 10.

PHYSICAL TRAINING

and

RECESSES.

2 hours a week.

Physical Training, 14 minutes a day. Recess, 10 minutes each forenoon.

Note: The time set apart for physical training and recesses must be so used as to meet the physical needs of the pupils. The recess must be given for withdrawals from the room, for the ventilation of class-rooms, and for recreation. If for any reason the recess be shortened or omitted, the time for the same must be given to physical training. Moreover, if a class or a school be prevented from using for manual training the time assigned, such school or class must use at least twenty minutes a day for physical training.

ELEMENTARY SCIENCE.

The purpose and method of the Grammar-School work in Elementary Science are largely coincident with the purpose and method of the Observation Lessons in the Primary Schools. The purpose is to train the senses and the intellectual faculties in their natural order of development; to form scientific habits of study, and to acquire such knowledge as will incite to further and more systematic study of the natural sciences; to build up the moral nature; and to lay the foundation of a well-rounded and practical education. The method from first to last is observation, experiment, and induction, with some form of expression—oral, graphic, or constructive—which shall complete and communicate the results of the work.

The right study of Elementary Science, at every stage of its progress, trains the mind by exercising the faculties of analysis, comparison, judgment, and taste as well as the other mental activities. This study should nourish the moral nature by creating a habit of sympathy and communion with nature; by arousing a love for beauty and symmetry of form, and by revealing the design and adaptation of structure in plant and animal life; by instilling a tenderness for lower forms and reverence for higher forms of being; by leading to a recognition of responsibility to law as manifested in natural phenomena, and of the power of habit as displayed in the structural growth of plant and animal life; by applying the laws of physical growth to mental and moral growth; by fostering an appreciation of the mutual helpfulness of all departments of nature and an apprehension of the providence and fatherhood of the Creator as shown in the life of nature.

ELEMENTARY SCIENCE.

Class VI.

1½ hours a week.

- 1. Lessons on the Human Body, with special reference to Hygiene:
- (a) The trunk, head, and extremities. (b) How to train the body so as to make and keep it healthful, strong, and graceful. (c) Simple study of the special senses; their use and abuse.
- Note 1: Each year of the Grammar-School course of study, teachers must give to their pupils instruction upon proper food and clothing, suitable exercise and rest, pure air, sufficient light, and temperance in eating and drinking. The attention of teachers is especially called to the requirements of the following law of this State: "Physiology and Hygiene, which, in both divisions of the subject, shall include special instruction as to the effects of alcoholic drinks, stimulants, and narcotics on the human system, shall be taught as a regular branch of study to all pupils in all schools supported wholly or in part by public money, except special schools maintained solely for instruction in particular branches." In order to meet the requirements of this law, at least one-fourth of the time set apart each year for instruction in Physiology and Hygiene must be given to the explanation of "the effects of alcoholic drinks, stimulants, and narcotics on the human system."
- 2. Observation lessons, as far as the time assigned will allow, on:
- (a) Plants, September to January: Common seed-vessels (milk-weed, berries); fruits (apple, grape); vegetables (squash, carrot); grains (rice, corn). January to April: Common trees (maple, pine); shrubs (hawthorn, arbor vitæ); stems (horse-chestnut, bamboo); woods (pine, oak, willow). April to June: Growth of seedlings (beans, peas, maple, morning-glory); buds, leaves, flowers, roots their shape, parts, uses,

and relations to the life of the plant. - Class collection of grains, woods, pressed leaves, and wild flowers. Specimens mounted, labelled, and arranged; woods cut in regular shapes, with one polished surface.

Note 2: Other familiar and available specimens may be substituted for those mentioned in any department of Elementary Science.
Note 3: The study of plant-life should be carried on

in connection with window-gardening or a school-garden.

- (b) Minerals: Common rocks, pebbles, sand, clay, soil, marble, peat, coal: Their relation to each other; their composition, history, and uses.
- (c) PHENOMENA OF NATURE: Air, wind, moisture, rain, steam, frost, hail, snow, ice.

Class V.

1½ hours a week.

- 1. Lessons on the HUMAN BODY, with special reference to Hygiene: (a) The bones as a framework and protection. (b) Their composition and structure. (c) Joints, ligaments, and cartilages. (d) The growth and health of bones; injury to and repair of bones, joints, and ligaments. (e) How exercise, rest, posture, clothing, food, alcoholic and other stimulants affect directly or indirectly the bones. (See note 1, page 8.)
- 2. Observation lessons, as far as the time assigned will allow, on:
- (a) Animals: Structure and habits of familiar and typical articulates and vertebrates (crab, spider, fly, butterfly, grasshopper; frog, fish, robin, hawk, hen, duck, cat, dog, pig, rabbit, horse, cow); with special reference to the relation of structure to conditions and modes of life. - Kindness to animals: anecdotes and stories read and told. — Class collection of insects and of animal products (wood, silk, fur, feathers, hide, bone, horn, ivory, nests, eggs, marine

or land shells, sponge, coral). — Written reproduction of lessons on specimens.

(b) Phenomena of Nature: Hills, valleys, rivers, lakes, seas. — Drainage and land-sculpture, with general notions of land-building and of the formation of the earth's crust. — Heat, cold, water, frost, and ice, as forces of nature.

Class IV.

11 hours a week.

- 1. Lessons on the Human Body, with special reference to Hygiene: (a) The muscles as a motor apparatus. (b) The structure, kinds, action, and uses of the muscles. (c) How muscles are developed. (d) The effects of exercise and rest and of the use of narcotics and alcoholic stimulants upon the muscles.
- 2. Lessons on the Human Body, continued: (a) The skin as a covering. (b) Its layers and structure; the hair and nails. (c) The perspiratory and sebaceous glands. (d) The functions of the skin and their relation to the health of the body; the effects of bathing and of proper clothing. (See note 1, page 8.)
- 3. Observation lessons, as far as the time assigned will allow, on:
- (a) Animals: Typical and familiar specimens of radiates and mollusks (sponge, coral, star-fish, oyster, snail, jelly-fish). Animals as related to arts, industries, trade, and commerce (elephant, whale, seal, cochineal, ostrich).
- (b) Plants used for food, clothing, shelter, fuel, and medicine (grains, vegetables, fruits; cotton, flax; pine, oak, maple, hickory; rhubarb). Plants as related to manufactures, trade, and commerce (manila, caoutchouc, oak, cotton, coffee, tea). Class collection of typical specimens.

- (c) Minerals: Systematic observations of common rocks and minerals (granite, quartz, feldspar, mica, hornblende, syenite, chalk, pudding-stone). Collection and labelling of specimens.
- (d) PHENOMENA OF NATURE: The sun, moon, and stars; their rising and setting: sun's mark at noon, altitude of the sun, length of days; phases of the moon; planets visible; polar and circumpolar stars.

Class III.

1½ hours a week.

- 1. Anatomy, Physiology, and Hygiene of the Human Body:
 - (a) The bones, muscles, and skin.
- (b) The growth, waste, and renewal of the body; the kinds and need of food and drink. The organs and processes of digestion. The relation of food, drink, and digestion to health.
- (c) The composition and uses of the blood. The organs of the circulation of the blood and their functions. The relation of the blood and its circulation to health.
- (d) The effects of the use of narcotics and of alcoholic and other stimulants upon the organs and processes of digestion and circulation. (See note 1, page 8.)
- 2. Observation lessons, as far as the time assigned will allow, on:

MINERALS: Metals (iron, lead, tin; gold, silver, copper; coal, crystals). — Class collection and labelling of minerals. — Abstracts of observation lessons.

NOTE: Plant and animal life and phenomena of nature are studied in Classes II. and III., as a part of Geography.

Class II.

1½ hours a week.

- 1. Anatomy, Physiology, and Hygiene of the Human Body, continued:
- (a) The composition and purity of the air. The organs of respiration and their functions. The structure of the lungs. The effect of respiration upon the air and blood in the lungs and upon the air in the room. The relation of respiration to health, with special reference to ventilation, disinfectants, exercise, and clothing.
 - (b) The vocal organs and their functions.
- (c) The nervous system as a directive power. Its organs and their functions. The relation of the nervous system to health, with special reference to exercise, work and study, rest and sleep, food and drink.
- (d) The special senses; the organs and their functions. How to keep the organs of sense in health, and how to train them.
- (e) The effects of the use of narcotics and stimulants upon respiration and the nervous system, and upon mental activity. (See note 1, page 8.)
 - (f) Reviews. (See the note on page 11.)

Class I.

2 hours a week.

- 1. Occasional lectures and conversations on Hygienic Duties. (See note 1, page 8.)
- 2. Observation lessons, as far as the time assigned will allow, on:

Common Metals, Minerals, and Rocks:

(a) Simple mineral substances — characters of:(1) Metals that are native minerals (gold, silver, copper).

- (2) Metals from ores (lead, zinc, tin, iron). (3) Nonmetals (sulphur, carbon). (4) Gases (oxygen, hydrogen).
- (b) Compounds: Iron-rust, commonly used iron ores, carbonic-acid gas, quartz, salt, pyrite, galena, limestone, gypsum, feldspar, mica, hornblende, granite, and other common rocks.
- 3. Common facts in Physics learned from observation and experiment, in regard to as many of the following topics as the assigned time will allow:
 - (a) Matter; its properties, its three states.
 - (b) Motion and force; laws of motion.
 - (c) Gravitation; equilibrium, pendulum.
- (d) Lever, wheel and axle, pulley, inclined plane, wedge, screw.
 - (e) Liquid pressure; specific gravity.
 - (f) Atmospheric pressure; barometer, pumps, siphon.
- (g) Electricity, frictional and current; conductors, magnetism, compass, magnetic telegraph.
 - (h) Sound; pitch of sounds, echoes, acoustic tubes.
 - (i) Heat; diffusion, effects, thermometers.
- (j) Light; reflection, refraction, lenses, solar spectrum, color.

NOTE: The greater part of the time assigned this year to Elementary Science must be given to Physics. If the teacher have not time to present to his class all the topics mentioned above, he will select such as he believes can be studied by his pupils with most advantage. He should, however, keep in mind the needs of such pupils as will finish their school training with the Grammar-School course of study.

Whatever topics be selected for study, it must be kept in mind that the method of studying them is all-important. Pupils should observe and express the facts and should make their own inferences. Thus a keen interest may be excited and the best of mental training secured — a training in the practice of close observation, in care-

ful thinking, and in accurate description.

MANUAL TRAINING.

The relation of Manual Training to the study of Elementary Science is intimate and essential. Moreover, the relation of both to other departments of school-work — especially to language, geography, and drawing — is so close as to result in mutual helpfulness and in economy of time and effort.

The exercises in Manual Training are a means not only of physical and intellectual, but also of moral culture. They train to habits of accuracy, neatness, order, and thoroughness; they make a helpful occupation for otherwise unemployed time, or a relaxation from less pleasurable work; they present an incentive to good work in all directions; and offer at all times and in all connections a moral stimulus and preparation for usefulness at home and in the community.

Classes VI., V., IV.

2 hours a week.

SEWING, LIGHT TOOL-WORK, OR CLAY-MODELLING.

NOTE 1: All the girls in Classes VI., V., and IV. are to spend two hours a week in sewing. If, however, any girl shall have passed a satisfactory examination in sewing, she will be allowed to substitute for it some other branch of Manual Training.

Classes III., II.

2 hours a week.

COOKERY, CARPENTRY, OR CLAY-MODELLING.

Note 2: Every girl is to pursue a course of twenty lessons of two hours each in cookery, as a regular part of the work either of Class III. or of Class II. But a girl who shall have passed a satisfactory examination in cookery will be allowed to substitute for it some other branch of Manual Training.

MANUAL TRAINING.

Note 3: If the whole or a part of the time assigned to specified branches of Manual Training be not used therefor, such time may be given to any other of its authorized branches.

Class I.

2 hours a week.

Draughting and Cutting, Carpentry, or Clay-Modelling.

See note 3.

DRA WING.

Class VI.

1½ hours a week.

- 1. (a) Circle, ellipse, oval. (b) Objects based on these forms, drawn in two dimensions.
- 2. (a) Simple, compound, reversed, and subtile curves. (b) Objects based on these curves, drawn in two dimensions.
 - 3. (a) Hexagon, pentagon. (b) Abstract curves.
 - 4. (a) Arrangements of lines leading to design.
- (b) Very elementary design.
 - 5. Drawing from memory.

Note: In the above-noted, and in all similar exercises, the pupils should be led to see that the beauty and finish of lines are far less important than their position and direction; and that lines which do not express the meaning they were intended to convey — no matter how beautiful they may be — have no value as statements of facts.

Class V.

15 hours a week.

- 1. Review.
- 2. (a) Simple objects in two dimensions. (b) Octagon; spiral.
 - 3. Simple historic ornament.
 - 4. Repetition, alternation, proportion.
- 5. Drawing from memory and from the teacher's drawings on the blackboard.

See note under Class VI.

DRA WING.

Class IV.

15 hours a week.

- (a) Trefoil, quatrefoil.
 (b) Historic ornament.
 (c) Interlaced geometric forms.
- 2. (a) Axes of symmetry. (b) Units of design. (c) Conventionalism explained. (d) Elementary design from plant-forms. (e) Half-tinting.
- 3. (a) Objects based on an oval, drawn in two dimensions. (b) The circle seen obliquely.
- 4. (a) The cylinder, cone, and vase drawn in two dimensions. (b) The cylinder, cone, and vase drawn in three dimensions.
- 5. Drawing from memory, and from the teacher's drawings on the blackboard.

See note under Class VI.

Classes III., II., I.

1½ hours a week.

FREE-HAND AND INSTRUMENTAL DRAWING.

- 1. Constructive: From geometrical solids, and from common objects.
- 2. Representative: From geometrical solids, and from common objects.
- 3. Decorative: Historic ornament and elementary design.
 - 4. Review.

Note: No ruling is allowed in any part of the freehand drawing. In model and object drawing, and in geometrical and constructive drawing, the solids must be used for instruction and illustration.

MUSIC.

Classes I., II., III., IV., V., VI.

1 hour a week.

Note: Each special instructor of music will, under the direction of the Committee on Music, determine the topics, the order of topics, and the method of instruction, within his own circuit of schools.

Class VI.

10 hours a week."

Oral and Written Expression, including Writing, 5½ hours.

Reading 41 hours.

- 1. ORAL AND WRITTEN EXERCISES in the use of language as an expression of thought. Special attention to be given to correct forms of speech. - Material: (a) Elementary-Science lessons. (b) Supplementary reading. (c) Pictures. - Work: (a) Oral reproduction of the reading lessons. (b) Oral and written reproduction of what has been read or told to the pupils, or silently read by them. (c) Reproduction of lessons in Elementary Science and Geography. (d) Studies of pictures; stories told and written from them. (e) Conversations on good manners and good morals. (f) Letter-writing. (q) The correct pronunciation and use of words frequently mispronounced and misused. (h) Vowels and consonants. (i) Uses of the apostrophe. (j) Syllabication. (k) Common abbreviations. (l) Quotations. (m) Frequent dictation exercises for spelling, punctuation, and forms used in letter-writing.
- 2. WRITING: (a) Practice in the various movements of arm, hand, and fingers, with pen held correctly. (b) One writing-book completed each half-year, or its equivalent. (c) Copying from the blackboard. (d) Writing selections and dictated exercises in blankbooks.
- 3. READING: (a) From the authorized text-book; (b) from the permanent, or collateral, supplementary books; and (c) from the circulating sets of supplementary

books suitable for this grade. (d) A few choice selections of appropriate poetry are to be studied, committed to memory, and recited.

Note: The teacher should keep in mind the great object both of oral and of silent reading; viz., to understand and to acquire the thoughts and sentiments expressed in script or print. It is also the object of oral reading to express aloud or to communicate to others these thoughts and sentiments, in the words of the author. To do this with clearness and force demands of the reader a complete mastery of the words, distinct articulation, just emphasis, and right inflection. Frequent exercises to secure these essentials of good oral reading are especially desirable in the lower classes.

The supplementary reading, permanent and circulating, may be made of great educational value. Rightly used it will inform the mind, awaken thought, and improve expression; moreover, it will lead to the formation of good mental habits and to greater facility in reading. Every exercise in reading should be so conducted as to

hold the close attention of all engaged in it.

Class V.

10 hours a week.

Oral and Written Expression, including Writing, 5½ hours.

Reading, 41 hours.

1. ORAL AND WRITTEN EXERCISES in the use of language as an expression of thought. Special attention to be given to correct forms of speech.—*Material*: (a) Elementary-Science lessons. (b) Supplementary reading. (c) Pictures.—Work: (a) Oral reproduction of the reading lessons. (b) Oral and written reproduction of what has been read or told to the pupils, or silently read by them. (c) Reproduction of lessons in Elementary

Science and Geography. (d) Studies of pictures; stories told and written from them. (e) Conversations on good manners and good morals. (f) Letter-writing. (g) The correct pronunciation and use of words frequently mispronounced and misused. (h) Uses of the apostrophe. (i) Syllabication. (j) Abbreviations. (k) Quotations. (l) Frequent dictation exercises for spelling, punctuation, and forms used in letter-writing. (m) Spelling the plurals of nouns. (n) Compound words.

- 2. Writing: (a) Practice in free movements. (b) One writing-book completed each half-year, or its equivalent. (c) Copying from the blackboard. (d) Writing, in blank-books, selections and original and dictated exercises.
- 3. Reading: (a) From the authorized text-book; (b) from the permanent, or collateral, supplementary books; and (c) from the circulating sets of supplementary books suitable for this grade. (d) Λ few choice poems or selections from longer poems are to be studied, committed to memory, and recited.

Note: Read the note under Class VI. — Although, as in Class VI., the great aim of reading should be the comprehension and acquisition of the author's thoughts and sentiments, yet the mechanical part of oral reading should not be neglected. Judicious exercise of the organs of speech for two or three minutes each day, in order to give them more flexibility and greater precision in their action, will avail much.

In selecting poetry to be committed to memory, it should be kept in mind that the object of the exercise is not merely to cultivate the verbal memory,—important as that is,—but also to lead to the appreciation of the beauty of thought and expression, and to leave in the mind and heart sentiments that will enrich the life.

Class IV.

9½ hours a week.

Oral and Written Expression, including Writing, 5 hours.

Reading, 41 hours.

- 1. ORAL AND WRITTEN EXERCISES in the use of language as an expression of thought. Special attention to be given to correct forms of speech. - Material: (a) Elementary-Science lessons. (b) Supplementary reading. (c) Pictures.—Work: (a) Oral reproduction of the reading lessons. (b) Oral and written reproduction of what has been read or told to the pupils, or silently read by them. (c) Reproduction of lessons in Elementary Science and Geography. (d) Studies of pictures; stories told and written from them. (e) Conversations on good manners and good morals. (f) Letter-writing. (a) The correct pronunciation and use of words frequently mispronounced and misused. (h) Use of the dictionary for definitions and pronunciation. (i) Dictation exercises. (j) Some of the changes in the forms of nouns (inflection), and the purpose of such change (e.q., tooth, teeth; lady, lady's; ladies, ladies'). (k) Compound words. (l) A few roots, prefixes, and suffixes.
- 2. Writing: (a) Practice in free movements. (b) One writing-book completed each half-year, or its equivalent. (c) Copying from the blackboard. (d) Writing, in blankbooks, original and dictated exercises, poetry from memory, and choice extracts.
- 3. READING: (a) From the authorized text-book; (b) from the permanent, or collateral, supplementary

books; and (c) from the circulating sets of supplementary books suitable for this grade. (d) Choice poems or selections from longer poems are to be studied, committed to memory, and recited.

Note: Read the notes under Classes VI. and V. Work in the directions there indicated. The pupils are now able to understand and apply the essential principles of emphasis and inflection. Silent reading for the purpose of testing and increasing the ability to gather thoughts from the printed page will be found a valuable exercise. It will reveal the workings of the pupils' minds, and will prepare the way for a more useful study of text-books. The reading may sometimes be from a single book passed from pupil to pupil, all but the reader being listeners. Good listening helps to good reading, and emphasizes its importance.

Writing from memory poems that have been carefully studied, will give the mind a firmer hold on them, and

will prove in other ways a useful exercise.

LANGUAGE AND GRAMMAR.

Class III.

81 hours a week.

Oral and Written Expression, including Writing,

Reading, 4 hours.

45 hours.

1. ORAL AND WRITTEN EXERCISES: (a) Oral reproduction of the reading lessons. (b) Oral and written reproduction of supplementary reading matter. (c) Descriptions of scenes, real and imaginary. thoughts and sentiments in some simple poems expressed, or the story of them told, in the pupils' own words. (e) Conversations and written exercises on good manners

and good morals. (f) Conversations on geographical and historical subjects, in preparation for letters and other forms of composition. (g) Composition-writing, including the preparation of topics from which letters and other compositions may be written; paragraphing. (h) The correct pronunciation and use of words frequently mispronounced and misused. (i) Use of the dictionary. (j) Common homonyms and synonyms. (k) A few roots, prefixes, and suffixes.

- 2. Grammar. The Study of Easy Sentences:
 (a) The subject and the predicate. (b) Declarative, interrogative, imperative, and exclamatory sentences.
 (c) The uses of words in forming sentences preparatory to classifying words as parts of speech. (d) Nouns, pronouns, verbs, adjectives, adverbs, conjunctions, and interjections. (e) Adjective and adverbial phrases and clauses. (f) Prepositions.
- 3. WRITING: (a) Practice in free movements. (b) One writing-book completed each half-year, or its equivalent. (c) Copying short letters or notes, written in correct form. (d) Writing, in blank-books, original and dictated exercises, poetry from memory, and choice extracts.
- 4. Reading: (a) From the authorized text-book; (b) from the permanent, or collateral, supplementary books; and (c) from the circulating sets of supplementary books suitable for this grade. (d) Choice poems and selections from prose are to be studied, committed to memory, and recited.

Note: Read the notes under Classes VI., V., and IV. The text-book in reading becomes of less importance as pupils reach the higher classes. Selections from it for class use should be worth studying, should create an

interest in the works from which they are taken, or should give good practice in different styles of oral reading. The great object of reading can now be accomplished by means of supplementary books. The right use of these in the class-room will lead pupils to read books elsewhere to the best advantage. Excite such an interest as will cause pupils to read with minds alert, and to seize upon the author's thoughts and sentiments with a grasp that holds. Suggest to your pupils interesting books that may be taken from the Public Library or its branches; and find out the results of the reading.

Class II.

8 hours a week.

Oral and Written Expres- | Reading, 3½ hours. sion, including Writing, 45 hours.

1. ORAL AND WRITTEN EXERCISES: (a) Reproduction of such supplementary reading matter as may be used. (b) Abstracts and summaries of lessons, of stories, and of other kinds of composition. (c) Conversations and written exercises on good manners and good morals. (d) Outlines prepared for original composition. (e) Narratives; descriptions of real or imaginary objects, scenes, and experiences. (f) Letter-writing upon geographical, historical, and other subjects; also, business letters, notes of invitation, of recommendation, etc. (q) Oral and written exercises on poems carefully studied; and also on beautiful pictures, statuary, etc., studied where opportunity offers. (At the Art Museum and elsewhere.) (h) Dictation exercises. (i) Synonyms. (j) A few roots, prefixes, and suffixes; and compound words.

2. Grammar. — The Study of Simple, Compound, and Complex Sentences: (a) Analysis. (b) All the parts of speech including their properties — special attention to be given to such changes of form as indicate properties, and also to the uses of auxiliaries. (c) Principles of syntax illustrated by familiar examples. (d) Punctuation.

Note 1: The scope of the work in Grammar for Class II. is the same as for Class II.; but easier sentences should be selected for Class II., and only the most common uses of the parts of speech should be studied.

- 3. Writing: (a) Exercises in free movements.
 (b) One writing-book completed each half-year, or its equivalent. (c) Copying bills, notes, receipts.
 (d) Writing, in blank-books, valuable extracts, compositions, dictated exercises, and reproductions.
- 4. READING: (a) From the authorized text-book; (b) from the permanent, or collateral, supplementary books; and (c) from the circulating sets of supplementary books suitable for this grade. (d) Choice poems and prose selections are to be studied, committed to memory, and recited.

Note 2: Read the notes under Classes VI., V.. IV., and III. The text-book need not now be used so much for drill in reading as for an introduction to works of good authors and for practice on passages that demand the expression of much feeling — passages not often occurring in supplementary books. Happily, the right teaching of the oral reading of such passages subserves the higher purposes of all reading, increasing the ability to take in the sense and sentiment and to feel their force. Most of the reading should now be from the supplementary books. The best use of these will produce mental activity and growth, will develop a sense of what is of real value in literature, and will begin to make the best authors companions and friends of the pupils.

Class I.

81 hours a week.

Oral and Written Expression, including Writing,

43 hours.

Reading, 3½ hours.

- 1. Oral and Written Exercises: (a) Reproduction of such supplementary reading matter as may be used. (b) Abstracts and summaries of lessons, of stories, and of other kinds of composition. (c) Conversations and written exercises on good manners and good morals. (d) Outlines prepared for original composition. (e) Narratives; descriptions of real or imaginary objects, scenes, and experiences. (f) Letter-writing on geographical, historical, and other subjects; also, business letters, notes of invitation, of recommendation, etc. (g) Oral and written exercises on poems carefully studied; and also on beautiful pictures, statuary, etc., studied where opportunity offers. (h) Paragraphing. (i) Synonyms. (j) Common roots, prefixes, and suffixes; and compound words.
- 2. Grammar. The Study of Compound and Complex Sentences: (a) Analysis of more difficult sentences. (b) Review of all the parts of speech, including a careful study of the properties and inflections of words. (c) Principles of syntax. (d) Punctuation.
- 3. Writing: (a) Practice in free movements. (b) One writing-book completed each half-year, or its equivalent. (c) A part of the exercises in writing to be connected with book-keeping. (d) Writing, in blankbooks, compositions and dictated exercises, commercial forms, business letters, and telegrams.

4. READING: (a) From text-books and from such books as are supplied for collateral reading or for general culture. (b) Choice poems and prose selections are to be studied and recited.

Note: Read the notes under Classes III. and II. The conditions are now more favorable for accomplishing the best results of reading. In the recitation of pieces, attention should be given to elocutionary effects. Moreover, in order to gain an understanding of metre and an appreciation of rhythm, pupils should now more directly study the forms of verse. They should be trained to give the sense, and yet to preserve the rhythm of the verse.

The more difficult reading matter, used by this class, will increase the mental grasp of the pupils and their ability to read well at sight. But chief emphasis must be laid on the highest object of all reading; viz., an acquaintance with literature for the truth it contains, for the ennobling sentiments it inculcates, and for the high ideals it presents.

Class VI.

2 hours a week.

FIRST STAGE OF THE STUDY OF GEOGRAPHY.

- 1. The earth as a whole: Its shape, surface, and general conditions, as studied with a school globe.
- 2. (a) Study of natural features by observation of real geographical forms: Boston and vicinity. (b) Drawing a plan of the school-room, school-house, and surroundings. (c) Use of the compass; direction, distance, position. (d) Study of a map of Boston and vicinity; modelling forms and surfaces observed in the vicinity. (e) Study of a map of the State and section; modelling the main features of the surface of the State and section.
- 3. General study from globe and maps: (a) The hemispheres continents, grand divisions, oceans, and large islands; their relative position and size. (b) The grand divisions position and climate (hot, cold, temperate); form, outline, surroundings; principal mountains, rivers, lakes; the most important countries, productions, people, cities; interesting facts and associations.

Note: The class are to read books treating of geographical subjects, and are to make collections of specimens of the materials and products mentioned in the reading and characteristic of the countries and places studied. Oral reproduction of the lessons should follow.

Class V.

2 hours a week.

FIRST STAGE OF THE STUDY OF GEOGRAPHY, CONTINUED AND COMPLETED.

4. (a) Study of our own country from the map. (b) Modelling the main outlines and features of our

- country. (c) General study of its different sections from maps of sections. (d) Imaginary travels in it; oral or written descriptions of these. (e) Class collection and mounting of specimens of the industries of our country.
- 5. Simple study of the *important countries* in each grand division: The position of the country in the grand division; its natural features, climate, productions; its people—their occupations, governments, manners, and customs; its noted localities, cities, *etc.*
 - 6. Trade and commerce; ocean routes.

NOTE: The class are to read books treating of geographical subjects, and are to make collections of specimens of the products mentioned in the reading and characteristic of the countries and places studied. Oral reproduction of the lessons should follow.

Class IV.

$2\frac{1}{2}$ hours a week.

SECOND STAGE OF THE STUDY OF GEOGRAPHY.

- 1. Study of the earth as a globe: Simple illustrations and statements with reference to form; size; meridians and parallels, with their use; motions and their effects; zones with their characteristics; winds and ocean-currents; climate as affecting the life of man (occupations, manners, and customs, etc.).
- 2. Physical features and conditions of North America, South America, and Europe, studied and compared (thus applying the previous study of this class): Position on the globe; position relative to other grand divisions; size; form; surface; drainage; climate; life vegetable, animal, human; regions adapted to mining agriculture, etc.; natural advantages of cities: comparison of physical

features and conditions of one grand division with those of other grand divisions. — Map-drawing on printed outlines, as the study, of each grand division proceeds.

Other grand divisions to be studied, if there be time.

3. Observations to accompany the study of geography:
(a) Apparent movements of the sun, moon, and stars, and varying time of their rising and setting. (b) Difference in heat of the sun's rays at different hours of the day. (c) Change in direction of the sun's rays coming through a school-room window at the same hour during the year. (d) Varying length of the noon-day shadows. (e) Changes of weather, wind, and seasons.

Class III.

2½ hours a week.

SECOND STAGE OF THE STUDY OF GEOGRAPHY, CONTINUED.

4. Physical and political geography of the countries in Europe and North America: (a) General review of the physical features of the grand division, including map-drawing. (b) Position of the country in the grand division; surroundings; surface; climate; vegetation; animals; resources; inhabitants — their occupations and social condition; important cities, towns, and other localities. — Map of the country to be drawn on printed outlines, as the study proceeds.

NOTE: The time given to the study of a country should depend upon its relative importance.

Class II.

2½ hours a week.

SECOND STAGE OF THE STUDY OF GEOGRAPHY, CONTINUED AND COMPLETED.

5. Physical and political geography (1) of the countries in South America, Asia, and Africa; (2) of Australia, Malaysia, and other islands of the Pacific: (a) General study of the physical features of the grand division, including map-drawing. (b) Position of the country in the grand division; surroundings; surface; climate; vegetation; animals; resources; inhabitants — their occupations and social condition; important cities, towns, and other localities. — Map of the country to be drawn on printed outlines, as the study proceeds. — General reviews.

Note: The time given to the study of a country should depend upon its relative importance.

Class I.

Readings on Physical Geography, in the time given to supplementary reading.

HISTORY.

Classes VI., V., IV.

- 1. Reading stories from American History.
- 2. Reading lives of persons famous in American History.
- 3. Describing visits to historic places, buildings, and monuments in and about Boston.

NOTE 1: The books used for reading may be permanent or circulating supplementary books, and the time spent in reading should be a part of that given to supplementary reading. The descriptions of visits may be oral or written, and should form a part of the work under Language.

Class III.

2 hours a week.

- 1. The study of American History through the War of the Revolution.
- 2. English and other European History to be studied so far as it is connected with American History.

Class II.

25 hours a week.

- 3. The study of American History, including United States History, completed.
- 4. The study of English and other European History so far as it is connected with American History.

HISTORY.

Class I.

3 hours a week.

- 5. The Civil Government of the United States, of Massachusetts, and of Boston.
- 6. Review of American History, including United States History, and also of its connection with English and other European History.
- 7. Reading lives of persons famous in English History.

NOTE 2: The study of Civil Government should be connected with the study of the history of the State and of the United States; and the actual workings of the city and the State government should be observed.

Class VI.

45 hours a week.

- 1. (a) Combinations of thousands, and of thousands with smaller numbers. (b) Writing and reading integers.
- 2. (a) Addition and subtraction of integers sums and minuends not to exceed one million. (b) Multiplication and division of integers products and dividends not to exceed one hundred thousand.
- 3: (a) Simple concrete illustrations of fractions. (b) Relations of tenths, hundredths, and thousandths to units and to one another. (c) Writing and reading decimals to and including thousandths. (d) The units of United States Money, with their relations to one another. (e) Ten times, one hundred times, and one thousand times integers and decimals to and including thousandths; one-tenth, one-hundredth, and one-thousandth of integers and of decimals—the result to contain no smaller decimals than thousandths.
- 4. (a) Addition and subtraction of decimals to and including thousandths; and (b) of United States Money.
- 5. (a) The units of Long, of Liquid, and of Dry Measure, with their relations. (b) Measuring distances and length, width, and height or depth.

Class V.

4½ hours a week.

Oral exercises with simple numbers, and arithmetic at sight, to precede, accompany, and follow each subject in written arithmetic.

- 1. Addition and subtraction of integers, of decimals, and of United States Money, continued.
- 2. (a) Multiplication and division of integers, continued. (b) Multiplication and division of decimals to and including thousandths, and of United States Money.
- 3. (a) The units of Square Measure, of Avoirdupois Weight, and of Time, with their relations. (b) Measuring the dimensions and finding the areas of squares and other rectangles.
- 4. (a) Simple concrete problems, oral and at sight, in common fractions. (b) Factors, measures, and multiples.

Class IV.

45 hours a week.

- 1. Common fractions.
- 2. (a) The units of Solid Measure, with their relations. (b) Measuring the dimensions and finding the volumes of cubes and other rectangular solids.
 - 3. Decimal fractions, to and including millionths.

Class III.

3½ hours a week.

Oral exercises with simple numbers, and arithmetic at sight, to precede, accompany, and follow each subject in written arithmetic.

- 1. Decimal and common fractions continued, and used in solving problems that involve the units of money, measures, weight, and time previously studied; and in measuring distances and dimensions, and in finding the areas of rectangles and the volumes of rectangular solids.
 - 2. Percentage; and its applications to -
 - (a) Commission and other simple subjects.
 - (b) Simple interest.

Class II.

35 hours a week.

- 1. Percentage, continued; its applications to -
 - (c) Profit and loss.
 - (d) Partial payments.
 - (e) Bank discount.

2. (a) Compound numbers with simple practical problems—including only the units previously studied, and the units of Troy Weight, Circular Measure, and English Money. (b) Mensuration of straight lines, of rectangles, and of rectangular solids. (c) Mensuration of angles, and of arcs of circles.

Class I.

3½ hours a week.

- 1. (a) Simple proportion. (b) Problems involving more than two ratios, to be solved by analysis.
 - 2. Powers of numbers.
 - 3. Square root and its common applications.
- 4. The cube root of perfect third powers (a) of integers from 1 to 12, both inclusive, and (b) of easy multiples of 10.
- 5. Mensuration of the parallelogram, triangle, trapezoid, and circle; of the right prism, pyramid, cylinder, and cone; and of the sphere.
 - 6. Reviews.

BOOK-KEEPING.

Class I.

 $1\frac{1}{4}$ hours a week.

Book-keeping by single entry.

Note: The study of book-keeping may be begun at such time during the year as the principal may determine; but the class must give to this subject the aggregate time prescribed.



SCHOOL DOCUMENT NO. 7-1891.

REPORT

OF THE

COMMITTEE ON SCHOOL-HOUSES

ON THE SUBJECT OF

SCHOOL-HOUSE SITES AND NEW SCHOOL BUILDINGS.



 $\label{eq:BOSTON:} \mbox{Rockwell and churchill, city printers.} \\ 1891.$

In School Committee, Boston, March 24, 1891.

Accepted, and the orders passed, and the report ordered to be sent to the City Council.

Ordered, That six hundred copies of the report of the Committee on School-houses be printed.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

In School Committee, Boston, March 24, 1891.

To the Honorable City Council of Boston:—

The communication dated Board of Aldermen, February 16, relating to a new school at Orient Heights, East Boston, and transmitted to us at the last meeting of the Board, has been referred to this committee. In reply, we beg to say that the need of such a school in that section of the city, to accommodate both Grammar and Primary scholars, is very urgent. The attention of the City Council was called to this in 1888, and the land was purchased for a new building in 1889. The money to build the same was included in the \$550,000 the City Council had determined to appropriate for the nine new school-buildings in December, 1889, but which, after the Thanksgiving-day fire, was all absorbed by the Fire Department. It was again in the loan order which passed the Board of Aldermen, December, 1890, but which failed to pass in the other branch. The School Board has done everything in its power to provide for the children in this rapidly growing section, and the plans are all ready for the building whenever the money shall be appropriated.

We beg to call the attention of the City Council to the fact that the school so greatly needed at Orient Heights is only one of several for which the necessity is as great. There were included in the loan order of last December the following:—

Number 1. Emerson District, Orient Heights, an eightroom building, as noted above.

Number 2. Bunker Hill District, Charlestown, a sixroom Primary. This building is to take the place of the two small buildings on Haverhill street, Charlestown, and the overflow school in Murray Chapel. In 1887, the Instructor of Hygiene, in his report to the committee, states that "the two schools on Haverhill street ought to be condemned and abandoned. They are unfit for school purposes, and it is not fair to the children to keep them in such quarters. It is only necessary to visit one of these little rooms to realize their unfitness. The dimensions are about 25 \times 19 \times 8½ feet, giving 72 cubic feet for each pupil instead of 216, the still too small amount allowed for each child in the schools of recent construction." To continue to keep little children in such quarters is a wrong which the city ought no longer to permit.

Number 3. Lowell District, Roxbury, a six-room Primary. This district is probably the most crowded in the city, and every sort of expedient has been resorted to, the last two years, to provide temporarily for the children. We are occupying one building, formerly a carpenter's shop, in which there are two classes; and also the rear of a chapel for another. In another of the primaries there are two rooms into which about 70 pupils have been put, although the regulation limit is 56. What is worse, children are still being refused admission, as there is no room for them anywhere. An order has been introduced to-night asking the Superintendent of Public Buildings to rent another room on Centre street to provide temporarily for some of the children.

Number 4. George Putnam District, a four-room Primary. This is another section of Roxbury rapidly growing, and where the school accommodations are entirely inadequate.

Number 5. Bowditch, formerly Hillside District, Jamaica Plain, a six-room Primary. It is nearly ten years since the

first effort was made to get better accommodations for this section. The present building is old, and there is an over-flow class of about sixty in a store, which is utterly unfit for a school-room. This section of the city is also growing very rapidly.

Number 6. An enlargement of the Clinch School, South Boston. This is one of the most pressing of all our needs. The children are now in temporary quarters over the Police Court. The court-room ventilates in part into the entry through which the children must pass into the school-room. What that atmosphere must be, any one who has occasion to visit a Police Court-room must know. And, worst of all, the whole moral atmosphere of such a place and its surroundings is unfit for little children.

There is also great need for increased accommodations in the Mather District, Dorchester. We have one class in the basement of the Mather School and two others are in the building formerly used as an almshouse, and the air here at times is most offensive. It was contemplated last year to make an addition to the present Mather Grammar School. Since that time it has been found possible to secure the Lyceum Hall property, so called, which will be better for the city's interest in every way. This matter is considered in a subsequent paragraph.

We would again call especial attention to the element of time in the building of these new school-houses. They are all comparatively small in size, and as the plans are all ready, if the money can be appropriated without further delay, they can be built and ready for occupancy soon after the opening of the school year in September. It is very important that this should be done.

It will be remembered that in January, 1889, this Board, finding there were so many earnest calls for increased school accommodations, had a canvass taken of the different districts of the city. The most important needs were selected and

brought forward at that time, and the others were compelled to wait. Your committee feel that in justice to these last, we have no right now to delay longer. Various petitions have been received from time to time, and citizens are making repeated complaints. The land should be secured at once for these different sections. In many cases it is appreciating very rapidly in value, and there are other purchasers for lots which the city ought to secure without further delay. In the two years that have elapsed since the first report was made, the growth has been large and the need is urgent. Your committee, under the orders of this Board, December 9 and 23, 1890, have publicly advertised for lots in these districts, and have had about fifty proposals. These they have examined very carefully, and beg leave to submit the following report with regard to the same:—

Number one is for a lot of land for a six-room building, to be used chiefly for Grammar pupils in North Brighton. This section is about a mile and a quarter from both the Allston and the Bennett Grammar Schools, and the section is growing rapidly. The Auburn Primary School in this section is full to overflowing, one class having seventy-one scholars. There is one Grammar class in this Primary building which should be removed. The Allston Grammar is also greatly crowded, having two extra classes in the hall. About 175 pupils in the Allston School live at North Brighton. When the new school is built this will relieve, therefore, the crowded condition of both the Allston Grammar and the Auburn Primary. There are several lots of land near the present school which are available. The best one, however, has some informality in the title, and it may be best for the city to take this under the right of eminent domain. A few days will determine this. We ask for an appropriation of \$5,500 to cover the amount needed.

Number two is for an enlargement of the Agassiz-school lot at Jamaica Plain. The Grammar school in this district

is more than full, and two classes are in an adjoining block. The Primary-school building near by is old and ought to be given up. The present Grammar-school lot is. however, larger than is necessary. The most economical plan for the city is to buy a strip adjoining the present lot, making it thereby large enough for both a Grammar and a Primary school. Figures have been obtained which show that the present Grammar building can be moved a few feet and altered into a Primary school for a comparatively small sum, and leave a splendid corner for the new Grammar building. When this is done the old Primary building and lot on Thomas street can be sold. By utilizing the lot in this way, making it available for two school buildings, and saving the old Grammar by altering it into a Primary, the city will be saved at least \$25,000. We recommend the purchase of Charles F. Farrington, his lot fronting on Burroughs street 293 feet, and adjoining the present Agassiz-school lot, and containing 8,726 5 square feet, for ninety cents per square foot: total, \$7,853.94.

Number three is for a lot of land for a Grammar school in the Mt. Vernon District, West Roxbury. This district is now growing rapidly. The present Grammar school is an old building of wood, and cannot wisely be enlarged. We have no Primary building in this section, but are renting a hall in which are several classes, one of the large rooms being divided by a sailcloth partition as a temporary arrangement. The plan is to buy a new lot for a Grammar school and use the present Grammar building for a Primary building. The committee have decided on what seems an especially desirable lot, centrally located, a little removed from the main street, and good in every way for school purposes. We recommend the purchase of the heirs of John A. Whittemore of 40,000 feet of land on Henshaw street, near Centre street, West Roxbury, said lot having a frontage on Henshaw street of 240 feet, for the sum of \$10,000.

Number four is for a lot for a Primary school to take the place of the present Baker-street School, near the Springstreet station, West Roxbury. This want is well known to the older members of the Board. The building is very old, and was practically condemned as unfit for use years ago. It is situated less than a mile from the Dedham line, far from any other school, and the people residing here have felt bitterly their poor school accommodations. We have selected a lot a few rods from the present site, but about eleven feet higher. We recommend the purchase of Margaret E. Welch, a portion of her lot of land on Gardner street, near Baker street, West Roxbury, next west of land of D. P. Hall, containing 30,000 feet, for nine cents per square foot; total, \$2,700. There should be put upon this lot a four-room building, so that it may be large enough for one or two Grammar classes of the lower grade, as it is so long a distance to the Mt. Vernon School.

Number five is for a lot of land on Beech street, near Washington street, Roslindale. This location is also growing very rapidly, and is over a mile beyond the Charles Sumner School, towards Dedham and Hyde Park. centre will in a few years, it is believed, be very densely populated, and we should provide not only for the present needs, but have land sufficient for a larger building at a future day. We recommend the purchase of Benjamin S. Welles and others, the south-east corner of their lot on Beech street, near Washington street, Roslindale, adjoining lot of Otto Gunther, with a frontage of 150 feet on Beech street, and containing 37,500 square feet of land, for the sum of \$5,500, a little less than fifteen cents per foot. It is proper to say that the city could have bought other portions of this lot at ten cents per foot, and also other land near at hand at the same price, but as the lot selected will cost very much less to grade, we believe it will be the most economical for the city in the end.

Number six is for a lot of land near the junction of Hyde Park avenue and Ashland street, and a short distance from the Mt. Hope station on the Boston & Providence Railroad. This is also to provide a Primary school for a section growing rapidly remote from other school accommodations, and where a great many children are out of school for this reason. As this location is so near the best railroad facilities, it will undoubtedly have a very large population at an early day. The committee have secured a lot on Canterbury street, corner of Sharon street, and they recommend the purchase of 34,266 square feet of land of Letitia B. Evans, for the sum of eleven cents per square foot; total, \$3,769.26. The committee had other land offered in this vicinity from nine to fifteen cents per foot, but this lot chosen, when we take into account the cost of grading, will be the best in our judgment for the city. When these last two lots are bought and buildings erected, there will be five school sections in the Charles Sumner District, and with a single exception no one building within nearly a mile of any other. Every room in the Grammar building is now occupied and also those in the Florence School. The building at Canterbury is full to overflowing, and both rooms in the Forest Hills School are occupied. These new buildings will not only give the accommodations so much needed, but will give relief to a very large number of small children who are now obliged to walk more than a mile to school over roads at certain seasons that are very hard to travel.

Number seven is for a new lot in the Gibson District, Dorchester. This section of the city is growing rapidly all about the present building on Columbia street. The plan of the committee is to change the District lines somewhat when the new building is ready, taking off a part of the present Lewis District of Roxbury, the Grammar school in which is greatly crowded. The present Gibson School will then be used as a Primary. We recommend the purchase of Francis

A. Brooks of his lot of land on the northerly side of Mt. Bowdoin avenue, having a frontage on that avenue of $229\frac{1.9}{100}$ feet, and bounded on the westerly side by land of Morse $167\frac{2.1}{100}$ feet, containing $36,671\frac{8}{10}$ square feet, for the sum of \$7,334, which is practically twenty cents per foot.

Number eight is for a new lot for a Primary school on Thornton street, Roxbury. This is another section of Roxbury which has grown rapidly, and the present two-room building cannot accommodate the children. The old lot is so very small a new building cannot well be put upon it of sufficient size for present needs. There is a lot near at hand, containing about 11,000 square feet, which the committee have wanted, but as the owner was supposed to be in California, no agreement as to price has been reached. We ask for an appropriation of \$5,500 to cover the amount of purchase in case a price can be agreed upon.

The total cost of the land for these above eight buildings is \$48,157.20.

As referred to in the first part of this report, it was the intention to provide the needed accommodations in the Mather District, Dorchester, by an addition to the present Grammar school, and an appropriation for \$30,000 for this purpose was asked for last year. Since that time, the city has had offered to them the present Lyceum-Hall lot, so called, on Meeting-House Hill, and adjoining the Mather-School lot containing about 26,000 feet of land and building, for the sum of \$10,000, the amount for which it was taxed last year. We would ask for appropriation of \$10,000 to buy said lot of Wm. R. Clark and others.

We consider this a very much better business transaction for the city than to alter the Grammar building. The cost of this lot and the alteration into a school building, we believe, will be less than to enlarge the present building, and the city will have a valuable piece of land adjoining its present lot. Furthermore, the increased accommodations can in this way be provided without disturbing in any way the present school. We ask for the sum of \$20,000 to pay for the enlargement of this Lyceum-Hall building, which, with the above \$10,000 to pay for the land, will be in lieu of the \$30,000 asked for last year to alter the Mather School.

It will be noted that the committee have, in every case, secured lots of land of good size, so that in future, when larger buildings are wanted, the city will not be compelled to buy new land at a large price. A few years ago a schoolsite was bought just the size needed at the moment, and this Board asked to have the adjoining lot secured, as it would certainly be needed at an early day; but the request was denied. Two years ago, when the necessity came, the lot had not only trebled in value, but it was also covered with an expensive building. Land is one of the best assets a city can have. It is almost sure to appreciate in value, and we think it is far better business to have larger lots, and then have school-houses of only two stories, and plainly built. Buildings depreciate in value, while land appreciates. Let us have less invested in that which is sure to decrease, and more in that which is almost sure to increase.

We think the time has fully come thus to take this comprehensive view of the school needs of the whole city. It seems at first as though the requests of the School Board were very large. But in this respect there are two things to be borne in mind: First, the buildings and land asked for in this report represent the accumulated arrearages of several years. This matter has been covered with so much detail in School Documents No. 1 of 1889, and Nos. 18 and 20 of 1890, that only a brief allusion need be made to it now. To provide for the natural growth of the city, the shifting of population, and the renewal of old buildings, the city should spend on an average every year for new Grammar and Primary schools at least \$200,000. Last year's report said from \$200,000 to \$300,000. This sum would provide, on

an average, one Grammar and one or two Primaries each year. These figures must be taken as an average, as it makes a material difference whether the school in some year is needed on the Back Bay, with land over two dollars a foot, or at West Roxbury, with land at nine cents per foot. For three or four years so little was spent for new buildings that there is a necessity for larger expenditures now. Taking the period of 1887 to 1892, inclusive, six years, there should be spent at the minimum given, \$200,000 per year, a total sum of \$1,200,000.

We have spent as follows: —

| | Land and New Buildings. | Enlarging Old. Buildings. |
|-----------------------------------|----------------------------|---------------------------|
| Thomas N. Hart School, \$131,- | buildings. | Dunungs. |
| 000, and land, \$30,000 . | \$161,000 00 | |
| First appropriation, H. L. Pierce | | |
| School | 30,000 00 | |
| Land for two Grammar and | | |
| seven Primary Schools, and | | |
| lot adjoining Dudley School, | | |
| in 1889 | 128,105 00 | |
| Appropriations for two Gram- | | |
| mar and two Primary build- | | |
| ings in 1890 | 340,000 00 | |
| Florence street, enlargement . | | \$20,000 |
| We need the following: — | | |
| Appropriation for five Primary | | |
| buildings | 195,000 00 | |
| Enlargement of Clinch School. | | 30,000 |
| [Both above, as passed by Board | | |
| of Aldermen only, in 1890, | | |
| and now asked for again]. | | |
| Enlargement of Mather School, | | |
| • to be appropriated in 1891, | 10,000 00 | 20,000 |
| Amounts carried forward, | \$864,105 00 | \$70,000 |

| Amounts brought forward, | \$864,105 00 | \$79,000 |
|--------------------------------|----------------|----------|
| Land for four Grammar and four | | |
| Primary schools, as above, | | |
| to be appropriated in 1891, | 48,157 20 | |
| Eight buildings for lots pur- | | |
| chased in 1891; estimated | | |
| cost | 375,000 00 | |
| | | |
| Total | \$1,287,262 20 | \$70,000 |

On the above basis, we shall thus in the six years have enlarged the Florence, Clinch, and building in Mather District at an expense of \$70,000, and have bought the land and built seventeen¹ new buildings, at a total cost of \$1,287,262, or an average of \$214,500 per year.

Upon this plan, in 1892, the city will have come back to its normal condition in the matter of building Grammar and Primary school-houses, and the regular appropriation of about \$200,000 per annum above noted will doubtless be sufficient in the future, unless the growth in the coming ten years is greater than in the past.

Second, The amount asked constantly for new school buildings would be materially lessened if the City Council would pass an order giving the School-house appropriation credit for the old buildings returned to them. This matter was referred to in the annual report of the School Committee of last year in the following words:—

"It has been the custom when a school building is surrendered by the School Committee to the City Council, and subsequently sold, to place the proceeds of such sales in the "sinking-fund" of the city. It appears to us if the money received from the sale of old school-houses and the land on which they are situated could be set apart and appropriated

¹ From 1875 to 1887 the city built 30 Grammar and Primary buildings.

for new school buildings, it would be a wise and just use of moneys so received."

| By vote of this Board on January 27 and Febru- | |
|--|-----------|
| ary 10, there has been given up by us the | |
| old Horace Mann lot on Warrenton street, | |
| valued at | \$34,000 |
| And the two school lots on East street, contain- | |
| ing 14,390 square feet, and valued at about | 140,000 |
| TD-4-1 | <u></u> |
| Total | \$174,000 |

We asked that this money should be applied to the redemption of the bonds for the new High School for Manual Training. But as it is not expected that this will cost at the outset but \$100,000, there will be here a surplus of \$74,000, which will more than pay for all the land for the eight lots now asked for.

| The old Mayhew School on Hawkins street is | |
|--|----------|
| valued at over | \$40,000 |
| And the old Franklin School on Washington | |
| street is estimated to be worth at least . | 150,000 |

We have given up by vote this evening the old Poplarstreet School and lot in Roslindale.

At the completion of the buildings now asked for, and under contract, we can give up the buildings and land

In Webster street, East Boston;
In Haverhill street, Charlestown;
The lot near the corner of Washington and Green street, Jamaica Plain;

The lot on Thomas street, Jamacia Plain;
The lot on South and Childs streets, Jamaica Plain;
The lot on Baker street, West Roxbury; and
The lot on Thornton street, Roxbury.

The value of all these lots will help towards paying for the eight buildings, for which an appropriation is now asked. We recognize fully that the whole responsibility for the methods of providing the means for our schools rests with the City Council. We would, however, respectfully suggest the importance of this question, and the unanimous opinion of this Board that the School-building appropriations ought to have some direct credit for buildings returned and sold or used for other purposes.

There will be another large saving when these buildings are erected. The city is now paying in these special districts for leased buildings, used as temporary accommodations, an annual rental of \$7,002, which is the interest of \$175,000 at four per cent.

As the value of the old school sites returned to the city is so very large, and as the city can borrow this year about three million dollars, we feel that it is not beyond our share—having fully in mind the other pressing needs of the city—to ask at an early day for an appropriation to cover these last eight buildings now called for. We give an estimate of their cost, based upon the estimated cost of recent buildings.

| Gardner-street Primary | | | | | | 4 rooms \$25,000 |
|--------------------------|----|------|-----|----|----|-----------------------------|
| Mt. Vernon Grammar . | | | | | | 8 rooms and hall . 60,000 |
| North Brighton Gramman | • | | | | | 6 rooms 35,000 |
| Thornton Primary | | | | | | 4 rooms 25,000 |
| Agassiz Grammar | | | | | | 12 rooms and hall . 100,000 |
| Beech-street Primary . | | | • | | | 4 rooms 25,000 |
| Canterbury and Sharon-st | re | et l | Pri | ma | ry | 4 rooms 25,000 |
| Gibson District Grammar | | | | | | 10 rooms and hall . 80,000 |

\$375,000

This Board desires to recognize the courtesy with which its requests have been received by the City Council, and to urge once more such prompt action that the children of our city may before many months be all provided for in proper school buildings, and that the temporary make-shifts of the past may never again be necessay.

Our children are our pride. Their proper care should be our first concern.

For the Committee on School-houses,

SAMUEL B. CAPEN, Chairman.

Ordered, That the City Council be requested to grant the following appropriations for school-house sites:—

| Lot for new School-house, North Brighton | \$5,500 | 00 |
|---|----------|----|
| Lot for new Grammar School-house in the | Ψο,σοσ | |
| Agassiz District | 7,853 | 94 |
| Lot for new Grammar School-house in the | | |
| Mt. Vernon District | 10,000 | 00 |
| Lot for new Primary School-house on Gard- | | |
| ner street, West Roxbury | 2,700 | 00 |
| Lot for new Primary School-house, Beech | | |
| street, Roslindale | 5,500 | 00 |
| Lot for new Primary School-house, Canter- | | |
| bury, corner of Sharon street, West Rox- | | |
| bury | 3,769 | 26 |
| Lot for new Grammar School-house in the | | |
| Gibson District | 7,334 | 00 |
| Lot for new Primary School-house in the | | |
| Dillaway District | 5,500 | 00 |
| Total | \$48,157 | 20 |

Ordered, That the City Council be requested to grant the following appropriations for new school buildings:—

| New Primary School-house, Gardner street, | | |
|---|---|-----------|
| West Roxbury, four rooms | | \$25,000 |
| New Grammar School-house, Mt. Vernon | | |
| District, eight rooms and hall | | 60,000 |
| New Grammar School-house, North Brigh- | | |
| ton, six rooms | | 35,000 |
| New Primary School-house, Dillaway Dis- | | |
| trict, four rooms | • | 25,000 |
| New Grammar School-house, Agassiz Dis- | | |
| trict, twelve rooms and hall | | 100,000 |
| New Primary School-house, Beech street, | | |
| Roslindale, four rooms | ٠ | 25,000 |
| New Primary School-house, Canterbury | | |
| street, West Roxbury, four rooms . | • | 25,000 |
| New Grammar School-house, Gibson Dis- | | |
| trict, ten rooms and hall | • | 80,000 |
| TD 4.1 | | A075 000 |
| Total | | \$375,000 |



SCHOOL DOCUMENT NO. 8 - 1891.

LIST

OF

CANDIDATES ELIGIBLE AS TEACHERS

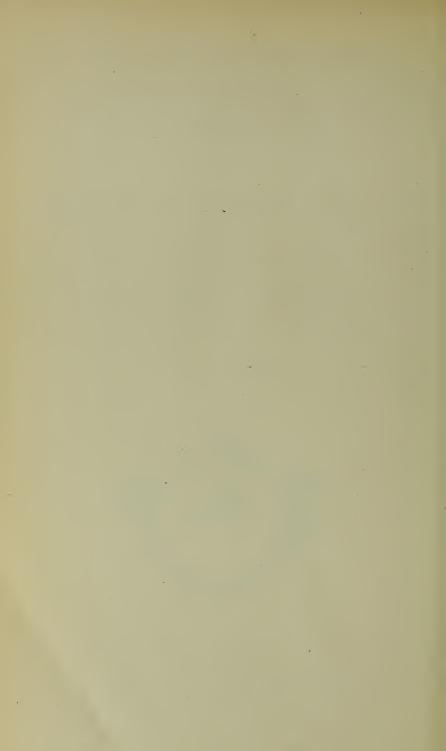
OF THE

PUBLIC SCHOOLS.

JANUARY, 1891.



 $$\rm B\ O\ S\ T\ O\ N\ :$$ ROCKWELL AND CHURCHILL, CITY PRINTERS. $1\,8\,9\,1\,.$



LIST

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CANDIDATES ELIGIBLE AS TEACHERS

OF THE

BOSTON PUBLIC SCHOOLS.

January, 1891.

The following list contains the names and addresses of those who hold certificates of qualification and of service, and who are eligible for service as teachers of the Boston public schools. Information concerning the several candidates, their experience, and evidences of success in teaching, etc., may be found at the office of the Board of Supervisors.

Special information respecting the graduates of the Normal School may also be obtained of the Head-Master of that school.

Unless it be otherwise stated, those engaged in teaching are employed in the place of address. The figure below the name of each candidate indicates the number of years he has taught school. The capital letters indicate the grade of school in which the candidate desires to teach, viz.: H., High School; G., Grammar School; P., Primary School; E., Evening School. The small letters indicate whether the candidate is available: as s., substitute; t., temporary teacher; p., permanent teacher. The candidates are ready for service at once, unless otherwise stated; the date, given in some instances, indicates that the candidate will be ready for service at that time. Example:—

John Blank Newton, Mass. [Teaching. 5. H. G. s.t.p.: Sept. 1, 1891.]

John Blank, teaching in Newton; has taught five years; will be available in a High or Grammar School as substitute, temporary, or permanent teacher, Sept. 1, 1891.

The names of those holding certificates, who are already employed as permanent teachers in Boston, are not given unless their certificates permit service in a higher grade.

FIRST GRADE.

HEAD-MASTERS, MASTERS, AND JUNIOR-MASTERS OF HIGH SCHOOLS AND OF THE NORMAL SCHOOL, AND HEAD-MASTERS OF EVENING HIGH SCHOOLS.

Daniel G. Abbott . . . North Reading, Mass.

[4. H. G. E. s.t.p.]

George W. Anderson . . 27 School Street.

[5½. H. s.t. E. s.t.p.]

Arthur W. Armstrong . . West Acton, Mass.

[Principal Acton High School. 10. H. p.]

Edward H. Atherton . . . 68 Winthrop Street, Roxbury.

[Teaching in Roxbury Latin School. 10. H. p.]

Albert W. Bacheler . . 11 Summer Street, Gloucester, Mass.
[Principal High School. 17. H. p.]

Sidney E. Bailey . . . 9 Webster Street, Hyde Park, Mass. [11\frac{1}{2}, H. G. E. s.t.p.]

Frank E. Bateman . . . 17 Parker Street, Charlestown.

[Teaching in High School, Providence, R.I. 21.5. H. E. t.p.]
Abby B. Bates Belmont Street, Newton, Mass.

[Teaching in High School. 3. H. p.]

Wallace C. Boyden . . . Bowers Street, Newtonville, Mass. [Sub-master in Normal School, Boston. 7.]

Nellie A. Bragg 1 Carlisle Street, Roxbury.

[Assistant in Roxbury High School. 11.]

John A. Brett 4 Laurel Street, Roxbury.

Charles H. Brock . . . 48 Montgomery Street.

[4. E. s.t.p.]
John E. Butler A Street, Jamaica Plain.

[3\frac{1}{4}. H. s. E. s.t.p.]
William T. Campbell . . Quincy, Mass.

[Teaching in Adams Academy. 14. Withdrawn for one year.]

Eva Channing Forest Hills Street, Jamaica Plain.

[2½. H. s.t.]

Henry J. Chase 18 Story Street, Cambridge, Mass. [18, H. G. E. s.t.p.]

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Emily L. Clark . . . Summit Street, Roslindale.
                [Assistant in West Roxbury High School. 31.]
                . . . . 3 Silver Street, Worcester, Mass.
Reuel B. Clark
                 [Teaching private pupils. 27. H. s.t.p.]
Edward H. Cobb . . . 7 Avon Street, Cambridge, Mass.
                 [Sub-master in Lawrence School, South Boston. 12. H. p.]
Levi L. Conant . . . Southborough, Mass.
                 [11. H. t.p.]
                 . . . . 146 Fulmouth Street.
Rest F. Curtis
                 [Associate Principal Chauncy Hall School. 12. H. p.]
Edith S. Cushing . . . 19 Ware Street, Cambridge, Mass.
                 [Assistant in Dorchester High School. 5.]
Sanford L. Cutler . . . Hatfield, Mass.
                 [Principal Smith Academy. 5. H. G. p.]
S. Warren Davis . . . West Newton, Mass.
                 [Teaching in Newton High School. 111. H. p.]
Lillian E. Downes . . . Box 740, Stoneham, Mass.
                 [Teaching in High School. 21. H. p.]
Edgar R. Downs . . . South Weymouth, Mass.
                 [Principal South High School. 14. H. p.]
William L. Eaton . . . Concord, Mass.
                 [Principal High School. 18. Temporarily withdrawn.]
Frederick T. Farnsworth . Brookline, Mass.
                 [Principal High School. 15. H. p.]
Clarence W. Fearing . . Braintree, Mass.
                 [Superintendent of Schools. 14. Withdrawn for one year.]
Jeremiah G. Foley . . . 168 West Springfield Street.
                 [41. H. G. E. s.t.p.]
Mary J. Foley
                 . . . . 1 Winthrop Square, Cambridge, Mass.
                 [Assistant in Girls' Latin School, Boston. 31.]
Henry E. Fraser . . . 2 Howland Street, Roxbury.
                 [Teaching in private school. 4. Temporarily withdrawn.]
                . . . . 53 Nahant Street, Lynn, Mass.
William Fuller
                  [Teaching in High School. 12. H. p.]
Charles W. Gerould . . . 539 Broad Street, Providence, R.I.
                 [Teaching in High School. 6. H. t.p.]
Wesley C. Ginn . . . . 12 James Street.
                  [27. H. G. E. s.t.p.]
John W. Gordon . . .
                              Barre, Vt.
                  [4. H. G. p.]
Edgar H. Grout . . . Woodbury, Conn.
                  [Principal Parker Academy. 5. H. p.]
Joseph C. Hagar . . . Cincinnati, O.
                  [Teaching in Franklin School. 5. H. p.]
William B. Harlow . . . 219 East Castle Street, Syracuse, N.Y.
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[Teaching in High School. 10. H. p.]

James E. Hayes . . . 20 Everett Street, Charlestown.
[Sub-master in Frothingham School. 5. H. p.]

James D. Horne . . . 61 Auburn Street, Haverhill, Mass.
[Teaching in High School. 6. H. p.]

Abby C. Howes 136 Beacon Street, Hyde Park, Mass.
[Assistant in East Boston High School. 4.]

Ray Greene Huling . . 195 Cottage Street, New Bedford, Mass.
[Principal High School. 21. H. p.]

Mary B. King Concord, Mass.

[Assistant in Girls' High School, Boston. 7.]

William A. Leahy . . . 53 G Street, South Boston.
[1. H. G. E. s.t.p.]

Arthur G. Lewis . . . 154 Lincoln Street, Worcester, Mass. [Principal Belmont-street Grammar School. 21. H. G. p.]

Charles E. Lord Box 973, Franklin, Penn. [Principal High School. 14. H. p.]

Alice H. Luce 40 Rutland Square.

[Assistant in Girls' Latin School. 7.]

Orson L. Manchester . . Joliet, Ill.
[Principal High School. 9½. H. p.]

C. Dwight Marsh . . . Ripon, Wis.

[Professor of Biology, Ripon College. 13. H. p.]

Alanson H. Mayers . . 57 Green Street, Charlestown. [Sub-master in Dearborn School, Roxbury. 7½. H. E. p.]

Samuel W. Mendum . . Cottage Side, Dorchester.

[Teaching in High School, Woburn. 5. H. p.]

Arthur B. Morong . . . 755 Tremont Street.
[22½. Evening High. p.]

Caroline B. Morse . . . 564 Franklin Street, Buffalo, N.Y.

[Teaching in private school. 5. H. p.]

William R. Morse . . . 94 High Street, Charlestown.
[Sub-master in Gibson School, Dorchester. 13. H. p.]

Frank P. Moulton . . . Hartford, Conn.
[Teaching in High School. 16. H. p.]

George H. Nichols . . . 395 East Fifth Street, South Boston.

[Teaching in private school, Boston. 7. E. p.]

Anna M. Olsson . . . 12 Putnam Avenue, Cambridge, Mass.

Frederic L. Owen, Jr. . . Canton, Mass.

[Sub-master in Sherwin School, Boston. $12\frac{1}{2}$. H. p.]

George F. Partridge . . . 13 Warren Avenue.

[Teaching in private school. 3½. H. p. E. s.t.p.]

Isaac F. Paul 209 Washington Street, Room 50.
[Head-master Evening High School. 5.]

Lucy G. Peabody . . . 16 Rockland Street, Roxbury.

[Teaching in private school. 9. Temporarily withdrawn.]

Henry Pennypacker . . 59 Clifton Place, Brooklyn, N. Y. [Teaching in Adelphi Academy. 2. H. G. p.]

John M. Pierce 18 Wallace Street, Cambridge, Mass.

[Temporary junior-master in Brighton High School. 5. H. G. E. s.t.p.]

Charles A. Pitkin . . . South Braintree, Mass. [Teaching in Thayer Academy. 15\frac{1}{2}. E. s.t.p.]

Albert Poor 42 Court Street, Room 1.

[8. Evening High. p.]

Milford S. Power . . . 583 Broadway, South Boston.

[Teaching in Chauncy Hall School. 3. H. p. Sept., 1891.]

Edward H. Rice. . . . Care of Rev. Dr. Rice, Springfield, Mass.

Walter A. Robinson . . 34 Chauncy Avenue, Somerville, Mass. [Sub-master in Dudley School, Roxbury. 15. H. p.]

George H. Rockwood . . . 66 Newton Street, Marlborough, Mass.
[Principal High School. 13. H. G. p.]

George W. Rolfe . . . 405 Broadway, Cambridge, Mass. [2\frac{1}{2}. H. s.t.p.]

John C. Rolfe Ann Arbor, Mich.

[Assistant professor in University of Michigan. 8. H. p.]

Walter H. Russell . . . 57 Cornhill.

[Principal High School, Barrington, R.I. 7½. H. G. p.]

Josiah P. Ryder 25 Saratoga Street, East Boston.
[Assistant in East Boston High School. 6.]

Sidney A. Sherman . . Beverly, N.J.

[Teaching in William Penn Charter School, Philadelphia. 52. Withdrawn for one year.]

James C. Simpson . . . Bellows Falls, Vt.

[Principal High School. 3. H. E. p. Sept., 1891.]

Melville C. Smart . . . Claremont, N.H. [Principal Stevens High School. 14. H. p.]

Frank W. Smith . . . Westfield, Mass.

[Teaching in Westfield State Normal School. $11\frac{1}{2}$, H. p.]

Iram N. Smith 1 Winter Street, Fall River, Mass.

[Teaching in High School. 12. H. p.]

Thomas S. Stein . . . Fredericksburg, Lebanon Co., Penn. [Teaching in Schuylkill Seminary. 13. H. p.]

Alaric Stone 128 Pembroke Street.

[Sub-master in Charles Sumner School, Roslindale. 12. H. p.]

Frederick E. Stratton . . 1314 Farnam Street, Davenport, Io. [Principal High School. 20. H. p.]

Benjamin Tenney . . . 92 Appleton Street.

[Student in Harvard Medical School. 6. H. G. s.t. E. s.t.p.]

Caroline W. Trask . . . 34 Pleasant Street, Gloucester, Mass. [Teaching in High School. 7. H. p.]

John Vaughn 12 Hotel Reno, East Windsor Street. [7. H. s.t.p.]

Herbert S. Weaver . . 85 Chester Square.

[Sub-master in Phillips School. 8. H. p.]

Mary E. Whipple . . . 16 Oread Street, Worcester, Mass.

[Teaching in High School. 10. H. p.]

Bessie R. White . . . 149 Perkins Street, Somerville, Mass.

[Teaching in High School. 4½ H. p.]

Walter P. White . . . 223 Dearborn Avenue, Chicago, Ill.

Harry W. Whittemore . 21 Dwight Street.

[3½. H. G. E. s.t.p.]

C. Howard Wilson . . . Newton Centre, Mass.

Henry M. Wright . . . Hingham, Mass.

[Principal Derby Academy. 5. H. t.p.]
Bertha G. Young . . . Winchester, Mass.

[Teaching in High School. 3. Withdrawn for one year.]

ADDITIONAL CANDIDATE WHO HOLDS A VALID CERTIFICATE.

William J. Gibson.

SECOND GRADE.

MASTERS AND SUB-MASTERS OF GRAMMAR SCHOOLS, PRINCIPALS OF EVEN-ING ELEMENTARY SCHOOLS, AND ASSISTANTS OF EVENING HIGH SCHOOLS.

Horace T. Atwood . . . Norwood, Mass.

[15. G. s.t.p.]

Benson B. Banker . . . 40 East Newton Street.

[8. E. s.t.p.]

Herbert H. Bates . . . 20 Wendell Street, Cumbridge, Mass.

[Principal Wellington Training School. 13½. G. p.]

E. Irving Beal . . . South Easton, Mass.

[Principal District No. 1 School. O. G. p.]

Harvey L. Boutwell . . 209 Washington Street, Room 32.

[7½. E. s.t.p.]
Clarence Boylston . . . *Milton*, *Mass*.

[Principal North Grammar School. 15. G. p.]

Frank W. Brett. . . . Highlandville, Mass.
[Principal Grammar School. 10. G. p.]

Benjamin F. Brown . . 7 Kenwood Street, Dorchester.

[16½. G. E. s.t.p.] own 85 Devonshire

William H. Brown . . . 85 Devonshire Street, Room 10.
[6. E. p.]

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Charles C. Bruce . . . 39 Swan Street, Medford, Mass.
                  [2. G. s.t.p.]
                              2 McClellan Avenue, Dorchester.
George B. Buffington . . .
                  [23½. G. E. s.t.p.]
                  . . . 26 Mellen Street, Cambridge, Mass.
Dana J. Bugbee
                  [2. E. s.t.p.]
Edward C. Burbeck . . Box 244, Danvers, Mass.
                  [Principal Maple-street Grammar School, Danvers Plains. 17. G. p.]
Arthur O. Burke . . . Brockton, Mass.
                 [Principal High School, Norwell. 1. G. p. E. s.t.p.]
Lewis A. Burr . . . Malden, Mass.
                  [Principal Centre Grammar School. 17. G. p.]
                 . . . . 276 West Rutland Square.
James Burrier
                  [Assistant in Brimmer School. 20. E. s.t.p.]
George H. Cary . . . . 16 Garland Street, Lynn, Mass.
                  [Teaching in Classical High School. 171. G. p.]
Frank A. Cattern . . . 53 Hancock Street.
                  [Teaching High School, Manchester, Mass. 21. G. E. p.]
Samuel W. Clarke . . . 31 Buckingham Street.
                  [24½. G. E. s.t.p.]
Daniel A. Clifford . . . Chelsea, Mass.
                  [Principal Carter Grammar School. 23½. G. E. p.]
Clarence P. Coburn . . P.O., Station A, Boston.
                  [6. G. p. E. s.t.p.]
Frank M. Copeland . . . 53 Tremont Street.
                  [8^{1}_{2}, E. s.t.p.]
Edward J. Cox . . . .
                             Lynnfield Centre, Mass.
                 [6\frac{1}{2}. G. s.t.p.]
Edward H. Delano . . . 235 Dorchester Street, South Boston.
                 [0. G. p. E. s.t.p.]
Edwin P. Dewey . . . Marcella-street Home, Roxbury.
                 [Assistant Superintendent and Principal of Marcella-street Home. 8. G. p.
                    E. s.t.p.]
Leonard L. Dick . . . Dummer Academy, South Byfield, Mass.
                 [Teaching in Dummer Academy. 2. G. E. t.p.]
                             129 Pembroke Street.
Rebecca L. Duncan . . .
                 [First Assistant in Brimmer School. 35.]
Frederic W. Elliott . . 232 Dudley Street, Roxbury.
                 [7\frac{1}{2}. E. p.]
Henry C. Fall
                 . . . . Pomona, Cal.
                 [5. Withdrawn for one year.]
Fred A. Fernald
                   . . . 9 Rutland Square.
                 [Teaching in private school. 4. E. p.]
Edward P. Fitts . . . Middleborough, Mass.
                 [Superintendent of Schools. 12. G. p.]
Harry F. Hathaway . . 31 Vinal Avenue, Somerville, Mass.
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[Principal Lincoln Grammar School, West Somerville. 1. G. p. E. s.t.p.]

Sumner W. Hines . . . 46 North Avenue, Cambridge, Mass.
[1. Withdrawn for one year.]

William H. Hobbs . . . Brockton, Mass.

[Principal Perkins Grammar School. 8. G. p.]

Charles E. Hussey . . . Newton Upper Falls, Mass. [Principal Prospect School. 15. G. p. E. s.t.p.]

Amy Hutchins 6 White Street, North Cambridge, Mass.

[First Assistant in Bowditch School, Jamaica Plain. 20.]

Frank L. Keith Front Street, Marblehead, Mass.
[Principal Story Grammar School. 10. G. p.]

Frederic W. Kingman . . West Bridgewater, Mass. [1. G. Evening High. s.t.p.]

William A. Lenihan . . . 9 Chelsea Street, East Boston. [2½, G. E. s.t.p.]

Susan C. Lougee . . . 138 Walnut Avenue, Roxbury.

[Assistant in Roxbury High School. 15.]

Frank M. McCutchins . . 6 Dexter Row, Charlestown.

[Teaching in Bryant and Stratton Commercial School. 13½. E. s.t.p.]

Frank P. McGregor . . . 72 White Street, Haverhill, Mass.
[Principal Short-street Grammar School. 16. G. p.]

John W. Mitchell . . . Rockland, Me.

[Principal Lincoln street Grammar School. 10. G. p.]

John J. Moran 370 E Street, South Boston.

H. Huestis Newton . . . 719 Tremont Street.

William M. Newton . . 169 Broadway, Everett, Mass. [Teaching in High School, Watertown. 2. G. E. p.]

William D. Parkinson . . 153 High Street, Taunton, Mass.
[Principal Cohannet School. 4. Withdrawn for one year.]

Emil C. Pfeiffer 57 Wendell Street, Cambridge, Mass. [5\frac{1}{2}, G. E. s.t.p.]

John D. Philbrick . . . 6 Hancock Street.

[5. G. E. s.t.p.]

Thomas B. Pollard . . . Quincy Point, Mass.

[Principal Washington Grammar School. 6. G. p.]

Joseph W. V. Rich . . . 22 Prospect Street, Woonsocket, R.I. [Principal High School. 17. G. p.]

Winfield S. Rich . . . Yarmouthport, Mass. [Principal High School. 7. G. p.]

John S. Richardson . . 27 Tremont Row, Room 5.

Wilbur J. Rockwood . . 17 Hamilton Avenue, Lynn, Mass. [Teaching in English High School. 8. G. p.]

Seth P. Smith 23 Court Street, [5 ²/₅, E. s.t.p.]

Wales R. Stockbridge, Jr. 13 School Street.

 $[1 \, 1/_5$. E. s.t.p.]

Edwin S. Thayer . . . 30 Walnut Street, Fall River, Mass.
[Principal Davis Grammar School. 23. G. p.]

Edgar E. Thompson . . . 26 Highland Street, Brockton, Mass. [Principal Whitman Grammar School. 141. G. p.]

George H. Tripp . . . Fairhaven, Mass.

[Principal Middle-street Grammar School, New Bedford. 15. G. p.]

W. Scott Ward Ashburnham, Mass.

[Teaching in Cushing Academy. 7. G. E. s.t.p.]

Milton B. Warner . . . 33 College House, Cambridge, Mass. [5. G. E. s.t.p.]

Edward A. Wilkie . . . 23 Milk Street.

[5. E. s.t.p.]

George Winch 3 Boynton Street, Manchester, N.H. [Principal Main-street Grammar School. 7. G. p.]

THIRD GRADE.

ASSISTANT PRINCIPALS, AND ASSISTANTS OF THE NORMAL AND HIGH SCHOOLS.

Lucy M. Adams . . . 45 Oxford Street, Cambridge, Mass.
[Student at Harvard Annex. 5. Withdrawn for one year.]

Winnie Austin . . . Castine, Me.

[Teaching in State Normal School. 5. H. p.]

Carrie L. Barker . . . Box 26, Plymouth, Mass.

[Teaching in High School. 3½. H. p.]

Gertrude E. Bigelow . . Rockland, Mass.

[First assistant in Rice Training School, Primary Dep't, Boston. 9. H. p.]

Almira Bixby 55 West Cedar Street.

Emma F. Black 204 Warren Street, Roxbury.

[Teaching in Lewis School. 10. H. p.]

Elizabeth H. Brewer . . . 128 Williams Street, Providence, R.I. [Teaching in private school. 15½, H. p.]

Charles C. Bruce . . . 39 Swan Street, Medford, Mass. [2. H. G. s.t.p.]

Grace M. Clark 69 St. James Street, Roxbury.

[Teaching in Lewis School. 6½, H. p.]

Fanny E. Coe Amory Street, Jamaica Plain.
[0. Temporarily withdrawn.]

Caroline J. Cole. . . . 27 Linden Street, Salem, Mass.

[Teaching in State Normal School. 27. H. p.]

Margaret Cunningham . 136 West Chester Park.

[Teaching in Gaston School, South Boston. 4. H. p.]

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O. Frederica Dabney . . 37 West Cedar Street.
                  [Teaching in Chauncy Hall School. 7. H. p.]
Gertrude P. Davis . . . 116 Zeigler Street, Roxbury.
                 [First assistant in Minot School, Neponset. 8. H. p.]
Florence Dix
                 . . . . 177 Falmouth Street.
                 [3. H. s.]
                . . . 8 Brighton Street, Charlestown.
Lucy C. Eliott
                 [5. H. s.t.]
S. Maria Elliott . . . . 118 Charles Street.
                 [Teaching in Walnut-street Primary School, Neponset. 16. H. p.]
Lilla N. Frost
                . . . . Harvard, Mass.
                  [Principal Bromfield School. 15. Withdrawn for one year.]
M. Augusta Gaffney . . Whitman, Mass.
                 [Teaching in High School. 53. H. p.]
Clarabel Gilman . . . 8 Harris Avenue, Jamaica Plain.
                 [17½. H. E. s.t.p.]
Anna E. Gooding . . . Arlington, Mass.
                 [Teaching in High School. 2. Withdrawn for one year.]
Maud Hadley
                 . . . Cumberland Road, Lowell, Mass.
                 [Teaching in High School. 5. H. s.t.p.]
Mrs. Eliza F. Hammond . 7 Durham Street, Suite 3.
                 [14<sup>1</sup>/<sub>3</sub>. H. G. s.t.p.]
Jennie E. Hintz. . . . 248 Newbury Street.
                 [10½. H. P. E. s.t.p.]
Kate F. Hobart . . . . "The Westland," Westland Avenue, corner
                                  West Chester Park.
                 [Teaching in Horace Mann School. 4. H. p.]
                 . . . 6 East Brookline Street.
Grace Hooper
                  [Teaching in Rice Training School, Primary Department. 20. H. p.]
Kate A. Howe . . . . 137 Hancock Street, Dorchester.
                 [Teaching in Mather School. 52. H. p.]
Frances W. Kaan . . . 12 Pleasant Avenue, Somerville, Mass.
                  [Teaching in High School. 17. H. p.]
Clara I. Metcalf . . . 505 Columbus Avenue.
                  [Teaching in Agassiz School, Jamaica Plain. 12. H. s.t.p.]
Alice T. M. Miller . . . 200 Eliot Street.
                  [4 months. H. G. s.t.p.]
Sarah L. Miner . . . . 62 Oak Street, Hyde Park, Mass.
                  [Teaching in High School. 12. H. p.]
Minna B. Noves . . . 281 Columbus Avenue.
                  [Teaching in High School, Winehester. 13. H. E. p.]
Lillie M. Packard . . . 538 Broadway, South Boston.
                  [Teaching in Lasell Seminary, Auburndale. 4. Withdrawn for one year.]
Emily M. Porter . . . 104 Dartmouth Street.
                  [Teaching in Mt. Vernon School, West Roxbury. 17. H. p.]
Josephine Rice . . . . Warren Street, Allston.
                  [Teaching in Allston School. 7. H. p.]
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Delia C. Rich 3 West Clark Place, Orange, N.J. [Teaching in private school. 9½. H. p.]

Elizabeth B. Sharp . . 3 Allston Street, Dorchester.

[Teaching in private schools. 19. Withdrawn for one year.]

Alma F. Silsby 21 Fuller Street, Brockton, Mass.

[Teaching in High School. 12. H. p.]

Helen H. Spaulding . . . 76 McDonough Street, Brooklyn, N. Y. [Teaching in Central High School. 7. H. p.]

Lydia M. Swett . . . Franklin Falls, N.H.

[Teaching in High School, Franklin, N.H. 5. H. p.]

Carrie A. Teele Medford, Mass.

[Teaching in High School. 13\frac{1}{2}, H. p.]

Mary A. Tenney . . . 78 Rutland Street.

[Temporary teacher in East Boston High School. 11. H. E. s.t.p.]

Addie L. Thing 19 Cherry Street, Lynn, Mass. [8, H. s.t.p.]

Mary F. Thompson . . 1507 Washington Street.

[First Assistant in Edward Everett School, Dorchester. 19. H. p.]

Harriet J. Thyng . . . 11 Lafayette Avenue, Chelsea, Mass. [Teaching in High School. 12. H. p.]

Grace A. Tuttle 113 Federal Street, Salem, Mass. [Teaching in High School. $6\frac{1}{2}$, H. p.]

Ellen Watson . . . Milton. Mass.

[Teaching in Milton Academy. 9½, H. p.] Emily V. White South Weymouth, Mass.

[11½. H. G. s.t.p.]

Harriet J. Williams . . 18 Adams Street, Somerville, Mass. [Teaching in High School, Waltham. 16½. H. p.]

Lena M. Wills 149 Roxbury Street, Roxbury.

[6. H. s.t.p.]

Mrs. Belle P. Winslow . 53 Dudley Street, Roxbury.

[First Assistant in Prescott School, Charlestown. 14. H. p.]
Lizzie J. Woodward . . 29 Copeland Street, Roxbury.

[Teaching in private school. 7. Temporarily withdrawn.]

FOURTH GRADE.

ASSISTANTS OF GRAMMAR SCHOOLS, TEACHERS OF PRIMARY SCHOOLS, AND ASSISTANTS OF EVENING ELEMENTARY SCHOOLS.

Etta M. Abbott 103 School Street, New Bedford, Mass.

[Teaching in Middle-street Grammar School. 10. G. p.]

Mary F. Atwood . . . 183 Shurtleff Street, Chelsea, Mass.

[Teaching in Williams Grammar School. 18. G. p.]

*Sarah A. Atwood . . . 241 Columbia Street, Dorchester.

^{*} Certificate of service.

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Mrs. Ida E. Bailey . . . 9 Webster Street, Hyde Park, Mass.
                  [4. Temporarily withdrawn.]
Celia Bamber
                 . . . 50 Falmouth Street.
                  [Temporary teacher in Walpole-street School. 8. P. E. s.t.p.]
Addie P. Barnes . . . 291 Chestnut Street, Chelsea, Mass.
                  [Teaching in Williams Grammar School. 21. G. p.]
Esther E. Barry . . . . Newtonville, Mass.
                  [Teaching in private school, Boston. 4½. E. s.t.p.]
                   . . . West Dedham, Mass.
Annie J. Barton
                  [Principal Colburn High and Grammar School. 19. G. p.]
Belle F. Batchelder . . . 7 Arlington Street, Lowell, Mass.
                  [Teaching in Bartlett Grammar School. 131. G. p.]
Florence O. Bean . . . 36 Staniford Street.
                  [Teaching in Bennett School, Somerville. 2. G. p.]
Lillie M. Beede . . . . 810 Tenth Street, South, Minneapolis, Minn.
                 [7. G. p.]
Olivia G. Berry . . . . 145 Main Street, Saco, Maine.
                  [Teaching Greene-street Intermediate School. 9. Temporarily withdrawn.]
Alice B. Besse . . . . Box 209, Lowell, Mass.
                 [Temporary teacher in Sycamore-street School, Oaklands. 41. G. P. p.]
Grace E. Besse . . . . Box 209, Lowell, Mass.
                  [5. G. P. s.t.p.]
                   . . . Johns Hopkins Hospital, Baltimore, Md.
Mary A. Boland
                  [Principal of Department of Cookery, Johns Hopkins Hospital Training School. 14½. G. p.]
Mrs. Sarah Brigham
                              Hotel Adams, Worcester, Mass.
                  [Teaching in High School. 20. Withdrawn for one year.]
Mary A. Browne . . . 58 Byron Avenue, Brockton, Mass.
                  [Teaching in Union Grammar School, Brockton. 2. G. P. p.]
Anna W. Bumstead . . 17 Tremlett Street, Dorchester.
                  [6\frac{1}{3}, G, p.]
Lydia J. Butler . . . Spencer, Mass.
                  [Teaching ungraded school, North Spencer. 11. G. P. p.]
*Clarabel E. Chapman . 5 Way Place, Roxbury.
                  [12\frac{1}{3}. G. P. s.t.]
Emma F. Chater . . . Box 295, Natick, Mass.
                  [Teaching in Centre Grammar School. 171. G. P. p.]
Helen P. Cleaves . . . 26 Puritan Avenue, Dorchester.
                  [Teaching in Fairmount Grammar School, Hyde Park. 13. G. P. p.]
Helen M. Cleveland . . Windsor, Conn.
                  [Principal High School. 12. G. p.]
Addie C. Cook . . . 34 Winthrop Street, Brockton.
                 [Teaching Primary School. 2. G. P. p.]
Mary A. Cooke . . . 20 Atwood Avenue, Roxbury.
                 [ 11. G. P. E. p.]
Edith G. Cram . . . North Attleboro, Mass.
```

[Teaching in Park-street Grammar School. 31. G. P. p.]

^{*} Certificate of service.

*Sarah E. Crocker . . . 169 Warren Avenue.

[22. P. s.t.]

Charles O. Cummings . . 4 Temple Street.

 $[1\frac{1}{3}$. G. E. p.]

*Ada L. Cushman 63 Inman Street, Cambridgeport, Mass.

[13. G. P. s.t.]

Jane A. Davey . . . South Hampton, N.H.

[Teaching Barnard High and Grammar School. 61. G. P. E. t.p.]

Frank J. Demond . . . 33 Bowdoin Street.

[5. E.t.p.]

Mrs. Sarah A. Dimick . . 47 Fowle Street, Woburn, Mass. [11. Temporarily withdrawn.]

*Frances L. Dodge . . . 407 Main Street, Charlestown.

Eliza F. Dolan . . . Quincy, Mass.

[Teaching in Adams Primary School. 91. G. P. p.]

George F. Drake . . . 267 West Fifth Street, South Boston.
[6. G. P. E. s.t.p.]

Gertrude A. Earle . . . 8 Franklin Street, Somerville, Mass.

[Teaching in Davis Primary School, East Somerville. 61/4. P. p.]

Sarah E. Earley 79 Portland Street, Worcester, Mass.

[Teaching in Quinsigamond Grammar School. 7. G. p.]

Adelaide F. Eaton . . . South Hampton, N.H.

[Teaching in Winthrop Grammar School, Brockton, Mass. 31. G. p.]

Abba W. Field West Springfield, Mass.

[Teaching in Hooker Grammar School. 6. G. p.]

Philip M. Fitzsimmons . 17 Hanson Street.

 $[4\frac{1}{2}$. G. E. s.t.p.]

Harriet Foster . . . Reading, Mass.

[Teaching in Shepard Grammar School, Cambridge. 5. G. P. s.t.p.]

Gertrude A. Fuller . . . 32 Hancock Street, Salem, Mass.

[Teaching in Oliver Primary School. 8. Temporarily withdrawn.]

Lena A. Gookin . . . 5 Walden Street, Lowell, Mass.

[Teaching in Green Grammar School. 13\frac{1}{2}. G. p.]

Mrs. Helen S. Hale . . . Rowley, Mass.

[Teaching Grammar School. 10. G. p.]
Margaret A. Hanlon . . Sharon, Mass.

[Teaching in Grew Grammar School, Hyde Park. 5. G. P. p.]

Sarah E. Hannegan . . . 11 South Street, Portland, Me.

[Teaching in North Primary School. 5. Withdrawn for one year.]

Nellie A. Hanson . . . 26 Central Street, Montvale, Mass. [Teaching in Centre Grammar School, Winchester. 7. G. p.]

Roberta J. Hardie . . . Needham, Mass.

[Teaching in Mason Grammar School, Newton Centre. 10. G. P. p.]

Mary A. Harriman . . . Framingham, Mass.

[Student in Boston University. 0. Temporarily withdrawn.]

^{*} Certificate of service.

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Alzie R. Hayward . . . South Milford, Mass.
                  [Teaching in High School, Milford. 12. G. p.]
Clara C. Hewins
                              Dedham, Mass.
                   . . .
                  [Teaching ungraded school, Islington. 2. G. P. p.]
Annie G. Hill
                 . . . . Box 460, Everett, Mass.
                  [Teaching in Thorndike Grammar School. 1. Withdrawn for one year.]
*Harriet D. Hinckley . . 183 West Canton Street.
                  [35. G. s.t.]
Mary W. Hooke . . .
                              Castine, Me.
                  [Teaching Primary School. 20. Temporarily withdrawn.]
*Louise S. Hotchkiss . . 27 Lee Street, Cambridgeport, Mass.
                  [13. G. s.t.]
Fannie M. Houghton . .
                              West Acton, Mass.
                  [Teaching in Lawrence Grammar School, Longwood. 4. G. P. t.p.]
*Mary P. Howland . . 20 Oak Street.
                  [16½. G. P. E. s.t.p.]
Clara A. Jordan
                  . . . Forster School, Somerville, Mass.
                  [Teaching in Forster Primary School. 9. G. P. p.]
Annie L. Kendall . . . 201 Pleasant Street, Brockton, Mass.
                  [Teaching in Perkins Primary School. 14. G. P. p.]
Persis E. King . . . .
                              95 Waltham Street.
                  [17½. E. s.t.p.]
                              277 Haverhill Street, Lawrence, Mass.
Liela M. Lamprey . . .
                  [Assistant Principal of Training School. 7. G. P. p.]
Ellen P. Longfellow . . Crocker Hall, Framingham, Mass.
                  [0. G. P. s.t.p.]
*Mrs. Mary A. D. Maclean, 136 Falcon Street, East Boston.
                  [30. G. P. s. E. s.t.p.]
                   . . . 100 Camden Street.
Mary J. Marlow
                  [Temporary teacher in Sherwin School. 5. G. P. E. t.p.]
Emma C. McClellan . . 22 Harrington Avenue, Worcester, Mass.
                  [Teaching in Belmont-street School. 261. Temporarily withdrawn.]
Deborah A. McColl . . Hopkinton, Mass.
                  [Teaching Grammar School, No. 2. 41/2. Withdrawn for one year.]
Mary T. McColl . . . Hopkinton, Mass.
                  [Teaching Primary School. 9. G. P. s.t.p.]
Emma M. McCormick. . Spencer, Mass.
                  [Teaching in Maple-street Primary School. 31. G. P. s.t.p.]
Teresa McDonnell
                      . . 33 Main Street, Quincy, Mass.
                  [Teaching in Willard Primary School, West Quincy. 7. G. P. s.t.p.]
Catherine A. McEleney . 59 Harrison Avenue, Woburn, Mass.
                  [Teaching in Plympton Grammar School, Woburn Centre. 2. G.p.]
Susan E. McLane . . . Millis, Mass.
```

*Mrs. Helen A. Melrose . 104 Dartmouth Street.
[8\frac{1}{8}\frac{1}{8}\text{. G. P. s.t.p.]}

[Teaching in Adams Grammar School. 19. Temporarily withdrawn.]

^{*} Certificate of service.

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Lydia Mendum . . . Melrose Highlands, Mass.
                 [Principal Franklin Grammar School. 16. G. p.]
Susan N. Monk . . . .
                             Framingham, Mass.
                  [Teaching Grammar School, Wellesley Hills. 181. G. p.]
*Mrs. Sarah W. Moulton . Cure of Mr. George Barrows, North Easton,
                                  Mass.
                  [10. G. s.t.p.]
                      . . 406 Second Street, South Boston.
Elizabeth F. Mullen
                  [3. G. P. E. s.t.p.]
Adeline M. Murphy . . .
                              Box 1130, Stoneham, Mass.
                  [Principal Mission School, Boston. 2. G. P. p.]
                   . . .
                             31 Rutland Square.
Sarah D. Noves
                 [Teaching in Berkeley School. 4. E. s.t.p.]
*Mrs. Emma H. Nye . . .
                             248 Newbury Street.
                 [12½. E. s.t.p.]
Abigail L. O'Hara . . . 6 Conlin Court, Worcester, Mass.
                 [Teaching in Ledge-street Primary School. 21. P. p.]
                  . . . 20 Everett Street, Somerville, Mass.
Mary E. O'Neill.
                 [5. G. P. E. s.t.p.]
Ellen A. O'Reilly . . . 10 Proctor Street, Gloucester, Mass.
                 [0. G. P. s.t.p.]
Jennie W. Papworth . . 955 Madison Avenue, Cleveland, O.
                  [Teaching in Lincoln Grammar School. 121. G. p.]
*Mrs. Flora J. Perry . . 545 Shawmut Avenue, Suite 12.
                 [Temporary teacher in Yeoman-street School. 181. G. P. s.]
Lizzie G. Perry . . . .
                             151 Worcester Street.
                  [16½. P. s.t.p.]
*Mary W. Perry . . .
                              72 Hawthorne Street, Malden, Mass.
                 [17\frac{1}{2}. E. s.t.p.]
Annie B. Porter . . . .
                             11 East Shelby Street, Worcester, Mass.
                 [Teaching in Thomas street Grammar School. 12. Temporarily withdrawn.]
Bessie L. Preston . . . 58 Cliff Street, Roxbury.
                  [2. G. E. p.]
Herbert R. Roberts . .
                             12 Somerset Street.
                 [3. E. t.p.]
                             68 Warrenton Street.
Fanny L. Rogers . . .
                 [18. G. (higher class, girls') E. s.t.p.]
Mrs. Addie L. Smith . . 27 Medford Street, Malden, Mass.
                 [Teaching in Edgerly Grammar School, Somerville. 51. G.p.]
Lucy S. Smith
                 . . . .
                             68 Waltham Street.
```

[Teaching in Quincy-street School of Cookery. 9.]

[Student in Normal Art School. 22. E. s.t.p.]

Mrs. Althea W. Somes . 14 Edgewood Street, Roxbury.

Ella L. Sullivan 12 Langdon Street, Roxbury.

[6½. G. P. p. E. s.t.p.]

^{*} Certificate of service.

Helen J. Sullivan . . . Cor. Mechanic and Negus Streets, Webster, Mass.

[Teaching Prospect-street Primary School. 1. G. P. p.]

Katharine G. Sutliffe . . . 141 N Street, South Boston.
[1. G. P. E. s.t.p.]

Mrs. Maria R. Swan . . Care of Judge Brooks, Concord, Mass. [Teaching private pupil. 24. G. (higher class) p.]

Mary Sweeney 634 Broadway, Somerville, Mass.

[Teaching in Chapin Primary School, Winchester. 0. G. P. p. Sept., 1891.]

Mrs. Mary E. Thompson . 47 Chelsea Street, East Boston.
[18. G. P. E. s.t.p.]

*Mrs. Fannie B. Thorpe . 568 Columbus Avenue.

*Mrs. Annie M. Trundy . 278 Dudley Street, Roxbury.
[63. G. P. E. s.t.p.]

Annie E. Tucker . . . Melrose, Mass.

[Teaching in Primary School, Cochituate. 43. P. p.]

Susan M. Turner . . . 12 Varnum Avenue, Lowell, Mass. [Teaching Primary School, Brockton. 3. P. s.t.p. Sept., 1891.]

*Mrs. Maria A. Tyler . . 102 West Chester Park. [14½. G. P. E. s.t.p.]

Mary E. Wall 39 Thornton Street, Newton, Mass.

[Teaching in Lincoln Primary School. 4. Withdrawn for one year.]

Sarah S. Waterman . . Woburn, Mass.

[Teaching in Morse Grammar School, Somerville. 5. G. (higher class) p.]

Daniel W. Weis . . . 6 Murray Avenue.

Mabel F. Wheaton . . . 144 Warren Street, Roxbury.
[8. Temporarily withdrawn.]

Mand S. Wheeler . . . 4 Harrison Avenue, Salem, Mass.

[Teaching in Saltonstall Grammar School. 6½. G. P. p.]

Edith A. Willey . . . 16 Holborn Street, Roxbury.

[Temporary teacher in Lewis School. 2. G. P. s.t.p.]

Julia A. Williams . . . 104 Washington Street, Quincy, Mass.

[Teaching in Union Primary School, Braintree. 1. G. P. p.]

Mary A. Winslow . . . 117 School Street, Roxbury.

[Teaching in Grew Grammar School, Hyde Park. 15. G. (higher class) p.]

Alice C. Moses.

Clara A. Wood 113 Pembroke Street.

[16. G. (higher class) E. p.]

ADDITIONAL CANDIDATES WHO HOLD VALID CERTIFICATES.

Ernest W. Branch.
Margaret Downey.
Sarah J. Fahy.

Mary F. Riley. Annie A. Robinson.

Susan H. McKenna. Mrs. Sarah C. Woodward.

^{*} Certificate of service.

FIFTH GRADE.

TEACHERS OF PRIMARY SCHOOLS AND ASSISTANTS OF EVENING ELEMENTARY SCHOOLS.

Emma S. Fisk 8 Albion Place, Charlestown.

[9½. E. p.]

Annie L. Wood Box 178, Newton, Mass.

[Teaching in Underwood Primary School. 14. P. p.]

SPECIAL GRADE.

ASSISTANTS IN EVENING HIGH SCHOOL.

*William H. Knight . . 16 Hancock Street.

*Charles E. Stetson . . Quincy Mass.

ASSISTANTS IN EVENING ELEMENTARY SCHOOLS.

†Moses Berger 38A Windsor Street.

[To teach English to German pupils.]

Mrs. Margaret Coyle . . 43 Upham Street, Melrose, Mass.

Frances V. Keyes . . . 32 Upton Street.

Louis Leyser. 38 Holyoke Street.

[To teach English to Germans.]

Daniel J. Mullen . . . 102 Quincy Street, Roxbury.

Mary W. Perry 72 Hawthorne Street, Malden, Mass.

Fredrik Petersen . . . 10 Tremont Row.

[To teach English to Swedes.]

Sigmund Pollak 123 Lenox Street.

[To teach English to a special class of foreigners in Hancock Evening School.]

Elizabeth N. Smith . . 86 Pinckney Street.

Edward E. Sparhawk . . 142 Seaver Street, Roxbury.

J. Herman Tryborn . . 147 Warren Avenue.

[To teach English to Swedes.]

TEACHERS OF PENMANSHIP, EVENING HIGH SCHOOL.

James W. Blaisdell . . . 3053 Washington Street, Roxbury.

Charles A. French . . . Inquiry Dept., Boston Post Office. Henry C. Kendall . . . 26 Essex Street.

Frank I. Temple . . . 13 Upton Street.

Leon M. Wallace . . . 18 Post Office Square, Room 4.

William A. Whitehouse . Box 277, Melrose Highlands, Mass.

Arthur T. Whittemore . Denver, Col.

^{*} Certificate of service.

[†]Holds also certificate of service as principal of evening school for instruction in English to German pupils.

TEACHERS OF PHONOGRAPHY, EVENING HIGH SCHOOL.

Thornton D. Apollonio . 43 Franklin Street.

Mrs. Mary A. Chandler . 251 Columbus Avenue.

William F. Donovan . . "Herald" Office, 255 Washington Street.

Albert E. Leon "Boston Globe," Editorial Rooms.

James B. MacHugh . . 23 Sharon Street.

William F. Murray . . . Press Club, 12 Bosworth Street.
Richard F. Sullivan . . . 30 Everett Street, Charlestown.
William B. Wright . . . 28 Pemberton Square, Room 9.

TEACHERS OF COOKERY.

Mary A. Boland . . . Johns Hopkins Hospital, Baltimore, Md.

Sarah M. Chase . . . 16 Woodville Square, Roxbury.
Catherine J. Coolidge . . Box 12, Wayland, Mass.
Ellen L. Duff 14 Sheafe Street, Charlestown.

TEACHERS OF FRENCH.

Paul L. Guerin 121 Beacon Street.

*Eugene Raymond . . . 12 Holyoke Street, Malden, Mass.

Mrs. Frances W. Smith . 20 Sharon Street.

Katharine Walker . . . 136 Huntington Avenue.

TEACHERS OF GERMAN.

Auguste Cohn 25 Sheridan Avenue, Jamaica Plain.

M. E. V. von Eckstädt . Mount Holyoke College, South Hadley,

Mass.

C. F. Richard Hochdörfer, 19 Ware Street, Cambridge, Mass.

Helene Motschmann . . . 135 Marlborough Street.

Alice Patten Hotel Clifford, Cortes Street.

†Julius A. Weigmann . . Bowe Street, Jamaica Plain.

TEACHERS OF FRENCH AND GERMAN.

Jacob Lehmann . . . Melrose Highlands, Mass.

Carrie A. Teele . . . Medford, Mass.

TEACHER OF MUSIC.

John A. O'Shea. . . . 49 Chelsea Street, East Boston.

^{*} Certificate of service.

[†] Holds also a special certificate as principal of evening school for instruction in English to Germans, Russians, and other foreigners.

TEACHER OF VOCAL AND PHYSICAL CULTURE.

Fanny L. Rogers . . . 68 Warrenton Street.

TEACHERS OF DRAWING.

*Charles L. Adams . . . Institute of Technology, Boylston Street. Herbert W. Adams . . . Institute of Technology, Boylston Street.

Ralph W. Allen . . . 1 Cortes Street.

Henry T. Bailey . . . North Scituate, Mass.
*George H. Bartlett . . State Normal Art School.

Mrs. Anna K. Blaisdell . 10 Hillside Avenue, Malden, Mass.

Annie E. Blake . . . 195 Warren Avenue.

Emma W. Bragdon . . Box 152, Portsmouth, N.H.

James Brough . . . 8 Bosworth Street.

Harold H. Brown . . . 213 Pleasant Street, Malden, Mass.

Wallace Bryant . . . Melrose, Mass.

Henry K. Burrison . . . West Newton, Mass.

Florence Cleaves . . . 637 Dudley Street, Dorchester.

Frank H. Collins . . . Denver, Col.

Ida Collins Newton Highlands, Mass.

M. Alma Comstock . . 12 Walker Street, Charlestown.

Anson K. Cross . . . 60 East Newton Street.

Amy F. Dalrymple . . . 694 Ninth Street, South Boston.

Alfred C. Eastman . . . West Dedham, Mass. Eliza S. Eaton 221 West Canton Street.

William P. Edwards . . 272 Norfolk Street, Mattapan.

Charlotte J. Emmins . . . 98 Myrtle Street.

Arthur H. Flint 65 Chandler Street.

Frank F. Frederick . . State Normal Art School.

Alfred W. French . . . Dent Street, West Roxbury.

*John L. Frisbee . . . Everett, Mass. Fred W. Hersey . . . Everett, Mass.

W. Bertha Hintz . . . 248 Newbury Street.

*George Jepson . . . 620 Atlantic Ave.

William L. Judkins . . State Normal Art School.

Henry H. Kendall . . . 8 Oliver Street.

Edward R. Kingsbury . . 152 Franklin Street. William H. Leavitt . . . 687 Tremont Street.

Hermon A. MacNeil . . Warren Street, Chelsea, Mass.

^{*} Certificate of service.

Rena McLauthlin . . . Matfield, Plymouth County, Mass. Helen F. Meehan . . . 24 Oakdale Street, Jamaica Plain.

M. Emeline Mendum . . . Cottage Street, Dorchester.

George E. Morris . . . Waltham, Mass.

Albert H. Munsell . . . 45 Quincy Street, Roxbury.

Adelaide C. Palmer . . 149A Tremont Street.

Zelpha M. Plaisted . . 8 Beacon Street.

William L. Skinner . . School of Design, Providence, R.I.

Ella C. Talbot . . . 8 Oakdale Street, Jamaica Plain.

Robert W. Vonnoh. . . Paris, France.

Albert L. Ware . . . 4 Greenough Avenue, Cambridgeport, Mass.

*George H. Young . . . 186 Devonshire Street.

TEACHERS OF KINDERGARTENS.

Cora E. Bigelow . . . Care of Miss A. P. Bates, 2475 Washington Street.

Blanche H. Boardman . Florence, Mass.

Gertrude Briggs . . . Box 230, Auburndale, Mass.

Alice S. Brown . . . 8 Claremont Park.

Cora V. Brown 16 Holborn Street, Roxbury.

Grace M. Brown . . . 9 Washington Street, Winchester, Mass.

Mrs. Marita M. Burdett . 138 West Canton Street.

Ella T. Burgess 175 Warren Avenue.

Mary E. Burnett . . . 8 Claremont Park.

Marion E. Child . . . East Walpole, Mass.

Mary E. Cochran . . . 22 Soley Street, Charlestown.

Auguste Cohn 25 Sheridan Avenue, Jamaica Plain.

Mary E. Cotting . . . 72 Chatham Street, East Lynn, Mass.

Bertha F. Cushman . . . Perry Street, Brookline, Mass.

Anna W. Devereaux . . 210 Washington Street, Marblehead, Mass.

Mary W. Dove . . . 44 Monroe Street, Roxbury.

Mabel S. Eddy 12 Wyoming Avenue, Melrose, Mass.

Sally Fairchild 191 Commonwealth Avenue.

Della A. Fay Florence, Mass.

^{*} Certificate of service.

Josephine Gay 51 Vernon Street, Roxbury.

Edith C. Gleason . . . West Medford, Mass.

Alice G. Haskell . . . Wakefield, Mass.

Anna H. Hunting . . . Newton Lower Falls, Mass.

Florence K. Johnson . . 36 Upton Street. Adeline T. Joyce . . . Brookline, Mass.

M. Elizabeth Lombard . 22 Hancock Street.

Eliza A. Maguire . . . 33 Auburn Street, Charlestown.
Sadie L. Marshall . . . Sycamore Street, Roslindale.
Mrs. Marian T. Morse . 108 Cedar Street, Malden, Mass.

Mary G. Murray . . . 32 Dorr Street, Roxbury.

Edith Noble 11 Meacham Street, North Cambridge,

Mass.

Frances L. Perkins . . Hotel Pelham, Boylston Street.

Mae K. Pillsbury . . . Melrose, Mass.

Mary B. Pope 1050 Adams Street, Dorchester.

Mary E. Powers . . . 201 Lexington Street, East Boston.

Sibyl E. Rolland . . . Dedham, Mass. Hetty B. Row 349 Charles Street.

Mary J. Scripture . . . Lincoln, Mass.

S. Anna Stetson . . . 206 East Congress Street, Detroit, Mich. Milla H. Temple Cor. Wood and Walnut Streets, Neponset.

Mary Wall 89 Chelsea Street, Charlestown. Ellen A. Webster . . . 1 Chestnut Street, Medford, Mass.

Anne M. Wells 52 Church Street, Hartford, Conn. Mabelle McQ. Winslow . 53 Dudley Street, Roxbury.

TEACHERS OF SEWING.

Mary F. Baker 27 Woodbine Street, Roxbury.

Susan E. Bartlett . . . 56 Elm Street, Charlestown.

Mrs. Eveline E. Beattie . 11 Parmenter Street.

Mrs. Theoda C. Bowker . Box 214, Natick, Mass.

Helen M. Cazmay . . . 56 West Newton Street. Kate A. Clare 15 St. Charles Street.

Mrs. Margaret Coyle . . 43 Upham Street, Melrose, Mass.

Annie M. Cullen . . . 3 Worthington Street, Roxbury. Lucinda W. Darrow . . . 637 Dudley Street, Dorchester.

Martha F. French . . . 4 Faxon Avenue, Quincy, Mass.

Mrs. Anna J. Goodwin . 377 Northampton Street.

| Mrs. Sarah G. Griffin | 60 West Rutland Square. |
|----------------------------|---|
| Mary A. Gunn | 37 Ash Street. |
| Johanna Hansen | |
| Mrs. Annie M. Hanson . | · - |
| Mrs. Oschophoria M. C. | |
| Holman | Newton Highlands, Mass. |
| Catherine F. Johnson | |
| Mrs. Elizabeth F. Lauler . | 207 West Springfield Street. |
| Adelaide L. Lovejoy | 3 Mountain Avenue, Malden, Mass. |
| Annie F. Marlowe | Newport Industrial School, 57 Broadwa |
| | Newport, R.I. |
| Mary E. McCarthy | 435 Fourth Street, South Boston. |
| Annie S. Meserve | 145 Eustis Street, Roxbury. |
| Ella F. Moore | 37 Old Harbor Street, South Boston. |
| S. Annie Moseley | Atlantic, Mass. |
| Mrs. Ellen B. L. Mott . | 8 London Street, East Boston. |
| Elizabeth T. Noon | 92 Huntington Avenue. |
| Margaret B. Packard | 74 Morton Street, Mattapan. |
| Anna H. Pope | Dorchester Ave., opp. Dix Street, Dorcheste |
| Esther C. Povah | 68 West Sixth Street, South Boston. |
| Elizabeth Pye | 673 East Fifth Street, South Boston. |
| Mary V. Riley | 6 G Street, South Boston. |
| Mrs. Mary E. Roach | 659 East Broadway, South Boston. |
| Lucy S. Robbins | 100 Roxbury Street, Roxbury. |
| Henrietta J. Ruggles | Buttonwood Street, Dorchester. |
| Mrs. H. M. Savage | |
| Mrs. Louisa A. Spooner . | 9 Summer Street, Charlestown. |
| Mrs. Sarah H. Strauss . | 36 Dwight Street. |
| Margaret T. Sullivan | 37 Old Harbor Street, South Boston. |
| Mrs. Mary E. Thompson. | 47 Chelsea Street, East Boston. |
| Frances Tully | 94 Prince Street. |
| Mary R. Wallcut | 100 Warren Street, Roxbury. |
| Emma G. Welch | 61 Linden Street, Dorchester. |
| | 173 K Street, South Boston. |
| O O | 19 Harvard Street, Charlestown. |
| Annie M. Williams | 56 Myrtle Street. |
| | |

GRADUATES OF THE BOSTON NORMAL SCHOOL.

ELIGIBLE FOR POSITIONS AS SUBSTITUTE, TEMPORARY, OR PERMANENT ASSISTANTS OF GRAMMAR, PRIMARY, AND EVENING ELEMENTARY SCHOOLS.

[The year following the name indicates the year of graduation.]

Margaret J. Adams (1887) . 27 Dorr Street, Roxbury. [1½, G. P. E. s.t.p.]

Elizabeth J. Andrews (1891) 11 Lovis Street, South Boston.

[0. G. P. s.t.p.]
Emma L. Baker (1891) . . . River Street, Mattapan.
[0. G. P. s.t.p.]

Bertha Bamber (1890) . . . 8 Auburn Street, Roxbury.

Margaret D. Barr (1888) . Coleridge Street, Harbor View, East Boston.
[2. G. P. E. s.t.p.]

Anna K. Barry (1883) . . . 5 Bowdoin Avenue, Dorchester. [2½. G. s.t.p.]

Alice L. Bates (1887) . . . 75 Maple Street, Waltham, Mass.

[Teaching in High-street Primary School. 3. G. P. p.]

Eugenia D. Bearse (1888) . 20 Sannders Street, Allston.

[Teaching in Highland Primary School, Winchester. 2. G. P. p.]

Mary E. Bernhard (1890) . 425 Broadway, South Boston. [½. G. E. s.t.p.]

Ellen S. Bloomfield (1888) . Rear 216 Marginal Street, East Boston. [24. G. P. E. s.t.p.]

Lucy M. Bosworth (1876) . 67 Elm Street, Charlestown.

Mary H. Brick (1890) . . . Percival Avenue, Dorchester.

Annie E. Briggs (1891) . . Box 107, Atlantic, Mass.

[Temporary teacher in Adams-street School, Neponset. 0. G. P. s.t.p.]

Ellen L. Brown (1881) . . . 23 Wabon Street, Roxbury. $[1\frac{1}{5}]$ G. P. t.p.]

Emily C. Brown (1891) . . Allston Square, Allston.

[0. G. P. s.t.p.] C. Margaret Browne (1891) . Harbor View Street, Dorchester.

[Temporary teacher in Savin Hill School. O. G. P. s.t.p.] Louisa W. Burgess (1890) . 72 Fuller Street, Dorchester.

[4 months. G. P. s.t.p.]

Caroline M. Burke (1891) . Franklin Street, Watertown, Mass. [0. G. P. s.t.p.]

Emma Burrows (1891) . . . 70 Zeigler Street, Roxbury.

Florence Cahill (1879) . . . 6 Hartford Street, Dorchester.

Helen M. Canning (1887) . Walnut Hill, Dedham, Mass.

[Teaching in Avery Grammar School. 3. G. P. p.]

Amy Cheever (1888) . . . 14 Hawthorn Street, Roxbury.
[1½. Temporarily withdrawn.]

Hattie R. Christiernin (1890) 230 Bennington Street, East Boston.
[1/2, G. P. E. s.t.p.]

Annie W. Clark (1890) . . . 573 Dudley Street, Dorchester.

Winifred M. Clarkson (1885) 308 Dorchester Street, South Boston.
[Temporary teacher in Lawrence School. 4\frac{1}{2}. G. P. E. s.t.p.]

Addie F. Cleary (1888) . . . 60 Union Square, Somerville, Mass.

[Teaching in Peabody Grammar School, Cambridge. 2. G. p.]

Susie J. Clough (1886) . . Mattapan, Mass. [8 months. G. P. s.t.p.]

Mary E. Connor (1886) . . . 15 Codman Park, Roxbury.

Annie G. Conroy (1891) . . 66 Charter Street.

Hattie I. Cottrell (1890) . 118 Blue Hill Avenue, Roxbury. [3 months. G. P. s.t.p.]

Ellen V. Courtney (1888) . 649 Broadway, South Boston.
[Temporary teacher in Tuckerman School. 2. G. P. E. s.t.p.]

Cecilia Coyle (1891) . . . 43 Upham Street, Melrose, Mass.

Mary P. Crosby (1888) . . . 70 Boylston Street, Jamaica Plain.

[Temporary teacher in Canterbury-street School. 1½. G. P. s.t.p.]

Emily L. Croswell (1890) . "The Rand," 76 West Rutland Square. [4 months. G.P. s.t.p.]

Mary C. Crowley (1891) . . 37 East Canton Street. [0. G. P. s.t.p.]

Catherine J. Cunningham (1886) 4 Snelling Place.

[Temporary teacher in Ware School. 5. G. P. E. s.t.p.]

Margaret J. Cunningham (1891) 29 Sharon Street.

[0. G. P. s.t.p.]

Mattie Currier (1891) . . 14 Sargent Street, Dorchester.

Grace R. Curtis (1888) . . . 106 Huntington Avenue.
[0. G. P. s.t.p.]

Elizabeth E. Daily (1890) . 40 Lawrence Street.

Isabel W. Davis (1890) . . 116 Z-igler Street, Roxbury. [3 months. G. s.t.p. P. s.t.]

Louise M. Davis (1891) . . 20 Quincy Street, Roxbury.

[0. G. P. s.t.p.] Persis S. Davis (1891) . . 15 Harvard Avenue, Allston.

[0. G. P. s.t.p.]

Sarah M. Dean (1891) . . 22 Huntington Avenue. [0. G. P. E. s.t.p.]

Christine Deane (1890) . . 40 South Russell Street. [1. G. P. s.t.p.]

Mary E. Denning (1891) . 216 Broadway, South Boston. [0. G. P. s.t.p.]

Bertha E. Dennis (1891) . · 77 Village Street.

[2. G. P. s.t.p.]

Grace C. Dillon (1891) . . 17 Thornley Street, Dorchester. [0. G. P. s.t.p.]

Sarah R. Dodge (1888) . . 40 Winthrop Street, Charlestown. [11. G. P. E. s t.p.]

Annie R. Dolan (1890) . . 4 Lathrop Place (off Hanover Street). [Temporary teacher in Cushman School. 1. G. P. E. s.t.p.]

Sarah A. Driscoll (1888) . 283 Walnut Avenue, Roxbury.

[Temporary teacher in Dearborn School. 13. G. P. E. s.t.p.] Sarah T. Driscoll (1891) . 391 Fourth Street, South Boston.

[0. G. P. s.t.p.] Frances S. Duncan (1891) . 189 Pearl Street, Cambridge, Mass.

[0. G. P. s.t.p.] Helen W. Durham (1890) . 18 Harris Avenue, Jamaica Plain. [2 months. G. P. E. s.t.p.]

Margaret L. Eaton (1891) . 33 Fayette Street.

[0. G. P. s.t.p.] Mary G. Ellis (1890) . . Bellevue Street, Dorchester.

[2 months. G. P. s.t.p.]

Amanda C. Ellison (1876) . 2717 Washington Street, Roxbury. [Teaching in Hope Valley School, Hopkinton, R.I. 8. G. P. p.]

Laura Emmell (1887) . . 128 Otis Street, East Cambridge, Mass. [Teaching in Thorndike Grammar School. 3. Withdrawn for one year.]

Hattie D. Field (1890) . . 487 Lebanon Street, Melrose, Mass. [Temporary teacher in Freeman School, Boston. 2 months. G. P. s.t.p.]

Mary H. Finley (1891) . . 808 Tremont Street. [0. G. P. s.t.p.]

Mary F. Finneran (1890) . Brookline, Mass.

[Temporary teacher in Winchell School, Boston. 2 months. G. P. E. s.t.p.]

Ada M. Fitts (1890) . . . 12 Madison Park Hotel, Sterling Street, Rox. [Temporary teacher in Hyde School. 1. G. P. E. s.t.p.]

Ella G. Fitzgerald (1890) . 218 Athens Street, South Boston. [3 months. G. P. E. s.t.p.]

Etta G. Fitzgerald (1890) . 33 Northfield Street.

[3 months. G. P. s.t.p.]

Margaret C. Flynn (1890) . 9 Warren Place, Roxbury.

[0. G. P. s.t.p.]

Rosanna Follan (1876) . . . 87 Green Street, Jamaica Plain. [6½. G. P. s.t.p.]

Ellen E. Foster (1891) . . . 3201/2 Tremont Street. [0, G. P. s.t.p.]

Catharine W. Fraser (1890). 195 Salem Street.

[Temporary teacher in Cushman School. 1/2. G. P. s.t.p.]

Anna M. Fries (1882) . . . 369 Dudley Street, Roxbury.

[Teaching in private school. 6. Temporarily withdrawn.]

Mary H. Fruean (1891) . . Upham's Court, off Boston Street, Dorchester.
[0. G. P. s.t.p.]

Agnes G. Gilfether (1888) . 772 E. Fourth Street, South Boston.

Mary V. Gormley (1890) . 1 Worthington Street.

[4 months. G. P. E. s.t.p.]

Mary L. Green (1891) . . . 16 Marcella Street, Roxbury.

Lillian G. Greene (1891) . 316 Warren Street, Roxbury.

Annie V. Hagerty (1888) . 39 East Brookline Street.

 $[2\frac{1}{3}$. G. P. E. s.t.p.]

B. Louise Hagerty (1888) . 39 East Brookline Street.
[2. G. P. E. s.t.p.]

Lillian M. Hall (1891) . . 532 Fourth Street, South Boston.

Agnes J. Hallahan (1890) . 19 Coleman Street, Meeting-House Hill,

Dorchester.

[2 months. G. P. E. s.t.p.]

Anna P. Hannon (1891) . . 533 Main Street, Charlestown.

[0. G. P. s.t.p.]

Martha S. Harding (1886) . Leyden Street, Orient Heights. [4. G. P. E. s.t.p.]

Florence Harlow (1888) . . . 587 Eighth Street, South Boston.

[Temporary teacher in Thomas N. Hart School. § G. P. s.t.p.]

Nellie E. Hastings (1885) . 31 Sixth Street, East Cambridge, Mass.
[Teaching in Boardman Primary School, Cambridgeport. 5. P. p.]

Hattie C. Hathaway (1885). Waltham, Mass.

[Teaching in New Church School. 4. P. p.]

Theresa E. Hayes (1888) . 20 Everett Street, Charlestown.

Callie H. Hayward (1890) . Box 93, Melrose Highlands, Mass.

[Temporary teacher in Gibson School, Dorchester. 3 months. G. P. s.t.p.] Elizabeth E. Henchey (1891) 51 Baldwin Street, Charlestown.

[0. G. P. s.t.p.]

Mary L. Hennessy (1888) . 24 Melrose Street.

[Temporary teacher in East-street School. 2\frac{1}{3}, G. P. E. s.t.p.]

Helena G. Herlihy (1891). . 32 Winthrop Street, Charlestown. [0. G. P. s.t.p.]

Josephine Higginbotham (1884) 56 South Street, Waltham, Mass. [Teaching in West Primary School. 4. G. P. p.]

Mary A. Higgins (1887). . 117 Cabot Street, Roxbury. [3½. G. (girls') P. E. s.t.p.]

Edith M. Hobbs (1886) . . . 34 Thornton Street, Roxbury. [‡. G. P. s.t.]

Gertrude L. Hodges (1890). 85 Revere Street.

[Temporary teacher in Webb School, East Boston. $\frac{1}{2}$. P. s.t.p.]

Edith K. Hodsdon (1882) . 17 Linden Street, South Boston. [4½, G. P. E. s.t.p.]

Margaret C. Hunt (1890) . 91 Linden Street, Allston.

[Temporary teacher in Allston School. 0. G. P. E. s.t.p.]

Adelaide E. Ingraham (1876) 281 North Avenue, North Cambridge, Mass.

[Teaching in Shepard Grammar School. 13. G. p.]

Blanche S. Jacobs (1890) . Melrose Highlands, Mass.

S. Janet Jameson (1890) . 18 Tremont Street, Charlestown. [4 months. G. P. s.t.p.]

Jennie M. Jamison (1888) . 48 West Cedar Street.

 $[1\frac{1}{2}$. G. P. s.t.p.]

Roxanna L. Johnston (1891) 38 Carson Street, Dorchester.
[0. G. P. s.t.p.]

Gertrude D. Kean (1890) . 280 West Fifth Street, South Boston. [4 months. G. P. E. s.t.p.]

Joanna G. Keenan (1891) . 3 Pickering Avenue, Roxbury. [0. G. P. s.t.p.]

Sabina F. Kelly (1891) . 44 Sawyer Avenue, Dorchester.

Matilda J. Kennemon (1886) 16 Hull Street.

[4. G. P. E. s.t.p.]

Annie M. Keough (1888) . 471 Columbus Avenue.

[1½. G. P. E. s.t.p.]

Mary E. Keyes (1890) . 7 Cottage Place.

[3 months. G. P. E. s.t.p.]

Gertrude H. Lakin (1891) . 353 Dudley Street, Roxbury.

[0. G. P. s.t.p.]

Floy Lathrop (1891) . . . Waltham, Mass.

[0. G. P. s.t.p.]

Anna M. Leach (1891) . . . 76 Circuit Street, Roxbury.

Helena F. Leary (1888) . . . 173 Athens Street, South Boston. [1 4-5. G. P. E. s.t.p.]

Julia G. Leary (1890) . . 936 Broadway, South Boston.

[1/2. G. P. E. s.t.p.]

Celia V. Leen (1890). . . 28 Charter Street.

 $[\frac{1}{2}$. G. P. E. s.t.p.]

Jane C. Levi (1887) . . . Newton Highlands, Mass.

[Temporary teacher in Concord street School, Boston. 2½. G. P. E. s.t.p.]

Mary L. Lewis (1885) . . 292 Princeton Street, East Boston.

 $[3\frac{1}{5}$. G. P. E. s.t.p.]

C. Emma Lincoln (1891) . Washington Street, Roslindale.

[0. G. P. s.t.p.]

Mary F. Lindsay (1891) . . 15 Old Hurbor Place, South Boston.

[0. G. P. s.t.p.]

Ada M. Litchfield (1890) . $15^{-1}/_2$ Shepard Street, Cambridge, Mass.

[Teaching in Wellington Training School. 1. G. P. p.]

Ella F. Little (1888) . . . 4 Oakland Street, Roxbury.

[1½. G. P. E. s.t.p.]

Alice H. Long (1875) . . . 280 Emerson Street, Melrose, Mass.

[Principal Vinton-street Intermediate School. 13. G. P. p.]

Annie V. Lynch (1891) . . . 92 Hyde Park Avenue, Jamaica Plain. [0. G. P. s.t.p.]

Mrs. Alice M. Macdonald (1879) 208 Lexington Street, East Boston. [8½, G. P. s.t.]

Emily H. Macdonald (1891) 5 Pleasant Street.

[0. G. P. s.t.p.]

Lillian J. MacRae (1890) . S Georgia Street, Roxbury. [2 months. G. P. s.t.p.]

Annie A. Maguire (1891) . 34 Sherman Street, Roxbury.

[0. G. P. s.t.p.]
Eliza A. Maguire (1890) . 33 Auburn Street, Charlestown.

[0. G. P. s.t.p.]
Mrs. Mary A. Mahan (1882) 8 Moon Street.

[6. G. P. E. s.t.p.]

Elizabeth M. Mann (1890) . 14 Greenough Avenue, Cambridge, Mass.
[3 months. G. P. s.t.p.]

Susan L. Mara (1888) . . 93 Pembroke Street.

[1½. G. P. s.t.p.]

Edith M. Martine (1888) . River Street, Mattapan.

[Temporary teacher in Bailey-street Primary School. 1½. G. P. s.t.p.]

Mary E. McCarty (1890) . 897 Albany Street.

[3 months. G. P. E. s.t.p.]

Mary F. McDonald (1888) . 9 Warren Place, Roxbury. [2. G. P. E. s.t.p.]

Martha C. McGowan (1890) 398 Longwood Avenue, Roxbury.

[Temporary teacher in Primary School, Lowell District. 4 months.
G. P. E. s.t.p.]

Margaret A. McGuire (1887) 35 Mindora Street, Roxbury.

[Temporary teacher in Comins School. $3\frac{1}{2}$. G. P. E. s.t.p.]

Mary E. McIntire (1890) . 492 Parker Street, Roxbury. [1 month. G. P. E. s.t.p.]

Annie M. McMahon (1891). South Street, Randolph, Mass. [0. G. P. s.t.p.]

Ellen A. McMahon (1886) . 223 Gold Street, South Boston. [Temporary teacher in Lincoln School. 3 G. P. s.t.p.]

Katharine A. McMahon (1886) 51 Allston Street, Charlestown. [2½, G. P. E. s.t.p.]

Annie E. McWilliams (1890) 12 Lawrence Street. [2 months. G. P. s.t.p.]

Mary E. Meaney (1890) . . Cypress Street, Brookline, Mass. [1½ months. G. P. s.t.p.]

Mary L. Merrick (1891) . . . 671 Washington Street, Dorchester.
[0. G. P. s.t.p.]

Anna G. Molloy (1886) . . Randolph, Mass.

[Teaching in Winthrop School, Brookline. $3\frac{4}{5}$. G. P. p.]

Mary F. Mooney (1891) . . Selden Street, Dorchester. [0. G. P. s.t.p.]

Eva C. Morris (1890) . . . 561 East Eighth Street, South Boston. [2 months. G. P. E. s.t.p.]

Cora B. Mudge (1891) . . . Chestnut Place, Jamaica Plain. [o. G. P. s.t.p.]

Annie B. Mulcahey (1891) . 866 Fifth Street, South Boston. [0. G. P. s.t.p.]

Mary E. Mullen (1885) . . . 5 Calvary Street, Waltham, Mass.

[4. G. P. s.t.p.]

Amelia M. Mulliken (1877). Box 103, Lexington, Mass. [Teaching in Hancock Primary School. 12. G. P. p.]

Sarah A. Mulloney (1885) . 12 Brookline Street, Cambridgeport, Mass. [Teaching in Willard Grammar School, Cambridge. 2. Temporarily withdrawn.]

Mary J. Murray (1890) . . . 25 Sharon Street. [4 months. G. P. E. s.t.p.]

Florence E. Neill (1888) . 200 Dorchester Street, South Boston.
[2. G. P. E. s.t.p.]

Annie Neville (1890). . . . 52 Winship Street, Brighton.

Annie M. Niland (1890) . Byron Street, Harbor View, East Boston.

[Temporary teacher in Cushman School. ½. G. P. E. s.t.p.]

Eliza R. Noyes (1874) . . Canton, Mass.

[Teaching in High School. 9. G. (higher class) p.]

Annie J. O'Brien (1890) . 56 Northampton Street.

[3 months. G. P. E. s.t.p.]

Elizabeth T. O'Brien (1891) 22 Chestnut Street, Charlestown.
[0. G. P. s.t.p.]

Mary F. O'Brien (1886) . . 19 Mitchell Street, South Boston.

[4½. G. P. E. s.t.p.]

Elizabeth E. O'Connell (1876) 50 Vale Street, Roxbury. [7. P. p. E. s.t.p.]

Julia K. Ordway (1891) . . . 766 Dudley Street, Dorchester.

Emily H. Osborne (1887) . 10 Melrose Street.

[Teaching in Malden-street Primary School, Revere. $2\frac{1}{2}$. G. P. E. p.]

Jessie G. Paine (1890) . . . 2 Laurel Street, Charlestown.
[2 months. G. P. s.t.p.]

Mary E. Palmer (1890) . . . 376 Dudley Street, Roxbury.
[4 months. G. P. E. s.t.p.]

Grace S. Peirce (1890) . . 104 Appleton Street. [2 months. G. P. s.t.p.]

Mary M. Perry (1888) . . 10 Gordon Street, Jamaica Plain.

[Teaching in Berkeley School. 2. Withdrawn for one year.]

Elizabeth F. Pinkham (1888) 39 Pleasant Street.

[$2\frac{1}{3}$. G. P. E. s.t.p.]

Lillian G. Plummer (1891). 91 Putnam Street, East Boston. [0. G. P. s.t.p.]

Emma F. Porter (1879) . . 72 Bonair Street, Somerville, Mass.

[Teaching in Prescott School, East Somerville. 6. G. p.]

Annie J. Reed (1891) . . . 438 Broadway, Somerville, Mass.
[0. G. P. s.t.p.]

Katharine A. Regan (1890) 49 Winchester Street. [2 months. G. P. E. s.t.p.]

Mary N. Regan (1890) . . . 49 Winchester Street.

Alice L. Reinhard (1891) . 149 Bowdoin Street, Dorchester.
[Temporary teacher in Primary School, Mather District. 0. G. P. s.t.p.]

Lena M. Rendall (1891) . . . 15 Oakland Street, Medford, Mass.
[0. G. P. s.t.p.]

Harriet Rice (1888) . . . Warren Street, Allston.

Florence H. Rich (1891) . 77 Village Street.

Elizabeth M. Richardson (1891) 13 Laurel Street, Roxbury.

Laura E. Richardson (1890) 13 Laurel Street, Roxbury.

[Student at Harvard "Annex." 0. Withdrawn for one year.]

Emeline W. Ripley (1888) . 7 Mt. Everett Street, Dorchester.

[Temporary teacher in Gibson School. 2. G. P. s.t.p.]

Alice E. Robinson (1884) . 1 Howland Street, Roxbury.

[Temporary teacher in Dillaway School. 4. G. P. s.t.p.]

Rosanna L. Rock (1891) . 567 Warren Street, Roxbury. [0. G. P. s.t.p.]

Lillian E. Rogers (1887) . Box 386, Newtonville, Mass.

[Teaching in Jackson Primary School, Newton. 23. G. p.]

Sarah E. Roome (1885) . . Clarendon Hills, Mass.

[Teaching in Greenwood Grammar School, Hyde Park. 41. G. P. p.]

Ariel D. Savage (1885) . . . 62 Washington Avenue, Chelsea, Mass.

[Teaching in Carter Grammar School. 5. G. P. p.]

Edith A. Scanlan (1888) . Hotel Warren, Roxbury.

[Temporary teacher in Hancock School. 2. G. P. E. s.t.p.]

Ellen A. Scollin (1890) . . . 494 Parker Street, Roxbury. [1 month. G. P. E. s.t.p.]

Annie W. Seaverns (1878) . 2 Dudley Place, Roxbury. [8. G. P. E. s.t.p.]

Josephine A. Seidensticker (1890) 89 Mt. Pleasant Avenue, Roxbury.

Elizabeth G. Shea (1890) . 316 Albany Street.

[1 month. G. P. s.t.p.]
Grace L. Sherry (1888) . . . 52 Dale Street, Roxbury.

[Temporary teacher in Lewis School. 1½, G. P. s.t.p.]

Mary F. Simmons (1890) . Wollaston, Mass.

[Temporary teacher in Freeman School, Boston. $\frac{1}{3}$, G. P. s.t.p.]

Annie E. Smith (1884) . . . 1 Phillips Court.

Bertha M. Smith (1888) . . . 205 School Street, Somerville, Mass. [1½. G. P. E. s.t.p.]

C. Florence Smith (1886) . 95 Columbia Street, Cambridgeport, Mass.

[Teaching in Boardman Primary School. 4. G. P. p.]

Helen D. Smith (1888) . . Pond Street, Jamaica Plain.

 $[\ \, {\it Teaching in private school.} \ \ \, {\it 2. Temporarily with drawn.}]$

Isabel A. Smith (1888) . . . 41 Crescent Street, Cambridge, Mass. [2 months. G. P. E. s.t.p.]

Elizabeth A. Spaulding (1891) 38 Saunders Street, Allston. [0, G. P. s.t.p.]

Mabel F. Spaulding (1890). 504 Fourth Street, South Boston. [4 months. G. P. s.t.p.]

Annie F. S. Stone (1891) . West Roxbury, Mass.

[0. G. P. s.t.p.]

Sarah E. Stumpf (1875) . . 640 East Fourth Street, South Boston.
[64. G. P. E. p.]

Katharine C. Sullivan (1887) 18 Hudson Street.

[2. G. P. E. s.t.p.]

Margaret J. Sweeney (1890). 696 Huntington Avenue.

[Student at Harvard "Annex." 4 months. Withdrawn for one year.]

Kate V. Tiernay (1887) . . . 110 Tyler Street.

[21. G. P. E. s.t.p.]

Lillian Tishler (1890) . . 18 Windsor Street, Roxbury.

[Temporary teacher in Wait School. $4\frac{1}{2}$ months. G. P. E. s.t.p.]

Ede F. Travis (1891). . . 51 Chestnut Hill Avenue, Brighton.

Alice Tufts (1891) . . . 21 Oak Street, Charlestown.

[0. G. P. s.t.p.]

Nellie L. P. Uihlein (1890) . 12 Mystic Street, Charlestown.

[$1\frac{1}{2}$ months. G. P. E. s.t.p.]

Emma L. Ward (1890) . . 31 Green Street, Charlestown.

[Teaching in Coverly Primary School, Malden. 31 months. G. P. p.]

Daisy E. Welch (1891) . . . 29 Telegraph Street, South Boston. [0. G. P. s.t.p.]

Ingemisca G. Weysse (1888). Park Street, West Roxbury.

Margaret M. Whalen (1891) 10 Tufts Street Charlestown.

Jennie E. Whoriskey (1890) 72 Gore Street, East Cambridge, Mass.

[Teaching in Wellington Grammar School, Cambridge. \(\frac{1}{2}\). E. s.t.p.]

Mrs. Mary E. Wilhar (1873) 12 Minot Street, Neponset.

[$5\frac{1}{3}$. P. s. E. s.t p.]

Annie M. Wilcox (1891) . 41 Revere Street.

[0. G. P. s.t.p.]

Augusta B. Williams (1890) 45 Charter Street.

 $[\frac{1}{2}$. G. P. E. s.t.p.]

Mary L. Williams (1891) . 192 Bennington Street, East Boston.

Fannie H. Wiswall (1877) . Dudley Avenue, Roslindale.

[5. G. s. in West Roxbury.]

Edith C. Worcester (1891) . 760 East Fourth Street, South Boston.

Agnes G. Wright (1890) . Cor. of Cedar and Quincy Streets, Dorchester.

[Temporary teacher in Edward Everett School. 3 months. G. P. s.t.p.]

Mary T. Wright (1891) . . . 109 Russell Street, Charlestown.
[0. G. P. s.t.p.]

ADDITIONAL CANDIDATES WHO HOLD VALID CERTIFICATES.

Ethel M. Barry.

Annette S. Blaney.

Velma E. Cobb.

Agnes F. Collier.

Lottie S. De Wolfe.

Esther E. Glynn.

Mabel E. Hodgkins.

Louisa E. Humphrey.

Nellie L. Knight.

Fannie J. Paul.

Alice M. Smith.

Gertrude D. Sprague.

Sarah E. Stuntz.

Jessie E. H. Thompson.

Althea M. Todd.

Mary N. Valentine.

Lillian A. Wellington.

Emma F. West.

Mabel F. A. Woodbury.

CERTIFICATED AT THE AUGUST EXAMINATION, OR LATER, AND APPOINTED SINCE.

FIRST GRADE.

John C. Ryder.

Alaric Stone. (To second-grade position.)

FOURTH GRADE.

Annie L. Bennett. Emma A. Child. Anna H. Farrar. Blanche A. Morrill. Helen M. Slack. Emma L. Stokes.

SPECIAL GRADE.

Cookery.

Josephine Morris.

Vocal and Physical Culture. Sara E. Miller.

Kindergartens.

Harriet A. Niel.

Alice T. Smith.

Graduated from Normal School, Kindergarten Course, June, 1890, and appointed since.

Phebe A. De Lande. Esther F. McDermott. Helen J. Morris.

Ellen M. Murphy.

Lena P. Stacy.



SCHOOL DOCUMENT NO. 9-1891.

REPORT

OF

COMMITTEE ON SUPPLIES.



 $$\rm B\ O\ S\ T\ O\ N\ :$$ ROCKWELL AND CHURCHILL, CITY PRINTERS. 1891.



THIRTEENTH ANNUAL REPORT.

COMMITTEE ON SUPPLIES.

Boston, May, 1891.

To the School Committee: —

The Committee on Supplies, in accordance with the requirements of the Rules, present their report for the financial year 1890-91.

The number of pupils belonging to the different grades of schools the past year was 67,022. These pupils were supplied with all the books and materials required to carry out the course of study as prescribed, in accordance with the free text-book law, which law makes it obligatory on the city to loan books and furnish supplies to all pupils.

The instructors were also furnished with text-books for desk use, stationery, and other supplies needed by them.

A few of the Grammar Schools and nearly all the Primary Schools were also furnished, in addition to the usual supplies, with a limited amount of material needed to carry out the course of study in manual training, each Primary School building having been supplied with clay, paper for folding and cutting, and a set of scissors.

In addition to supplying pupils and instructors, each school building was furnished with the necessary reference-books, maps, globes, charts, and other permanent material of a like nature needed during the year.

The janitors of 190 buildings used for school purposes were provided with all the materials required to keep the buildings in good order.

If to these expenses be added the cost for the printing required by the schools, the School Board and its officers, for the annual school-festival and for salaries paid for the work of receiving and delivering supplies, it will comprise nearly all the expenditures of this committee charged to the appropriation "Supplies and Incidentals."

Previous to last year the contracts for the coal and wood required were made by the Superintendent of Public Buildings, and all orders for fuel were forwarded to his office. The bills were first approved by him, and, after being examined and approved by your committee, were paid by the City Treasurer from the appropriation granted the School Committee for the purpose. The revised City Ordinances of 1890, Chap. 33, Sect. 2, relating to fuel for the public buildings, exempt the superintendent from purchasing fuel for the School Department, and under date of April 23, 1890, he notified the School Committee that thereafter the purchase of fuel was vested in the Board. This committee, to whom the matter was referred under date of June 4, 1890, issued proposals for furnishing coal for the various school-houses, and the contract was awarded to Messrs. H. G. Jordan & Co., they being the lowest bidder, as follows: -

Boston, June 14, 1890.

Dr. Russell D. Elliott, Chairman Committee on Supplies, Boston School Committee:—

DEAR SIR, — The undersigned will supply you with such quantities of coal as can be taken prior to October 1, delivered at the several districts, at \$4.83 per ton of 2,000 pounds, in accordance with your specifications. The above prices include broken, egg, and stove coal. The coal to be best quality hard white-ash coal, from the shipments of the Philadelphia and Reading Coal and Iron Co., or the Lehigh Valley Coal Company. We will agree to deliver the 9,000 tons during July and August, making daily deliveries of from 150 to 200 tons per day, according to the distance.

Respectfully yours,

H. G. JORDAN & CO.

After the expiration of the contract, an arrangement was made with Messrs. H. G. Jordan & Co. to continue furnishing the coal at the contract price, excepting in Brighton, Neponset, Dorchester Lower Mills, and West Roxbury, where an additional charge of fifty cents per ton for teaming was made, which arrangement lasted throughout the year.

The contract for the wood was made with the Overseers of the Poor, the prices per cord varying according to the number of cuts, and being the same as were paid the previous year.

During the year 11,064 tons of coal were furnished by Messrs. H. G. Jordan & Co., and in addition 288 tons were purchased early in the year under contracts made by the Superintendent of Public Buildings.

In February, 1890, this committee presented to the Committee on Accounts the yearly estimate of the money needed for this department, which amount was approved and transmitted to the City Auditor.

The total amount requested was \$178,600, — \$80,200 for fuel, gas, and water, and \$98,400 for supplies and incidentals. The City Council reduced the amount requested for supplies and incidentals \$8,400, granting \$170,200 for both appropriations. In addition, the city credited \$981.68 received from the State of Massachusetts, on account of travelling expenses of pupils in the Horace Mann School, making the total amount available \$171,181.68. It was necessary to reserve about \$15,000 of this amount, to make good a deficiency in the amount allowed for salaries of instructors, if the School Committee were to keep within their appropriation; and, on account of the low price of coal and the saving in the cost of supplies, this result was accomplished.

The expenditures for the year have been as follows:—

| Appropriation "Su | applies | and I | ncid | entals | : "- | _ | | | | |
|--|----------|---------|------|--------|--------|------|---------|-----|-----------|----|
| Text-books . | | | | | | \$2 | 25,408 | 15 | | |
| Writing-books . | | | | | | | 5,702 | 95 | | |
| Drawing-books | | | | | | | 5,215 | 66 | | |
| Reference-books | | | | | | | 1,053 | 67 | | |
| Record-books . | | | | | | | 293 | 70 | | |
| | | | | | | - | | | \$37,674 | |
| Books for supplem | entary | readi | ng | • | • | | • | | 3,400 | |
| Annual festival . Globes, maps, and | | • | • | • | • | | • | | 2,100 | |
| | | • | • | • | • | • | • | | 459 | 39 |
| Musical expenses: | | | | | | | | | | |
| Instruments, rep | airs, a | nd cov | ers | | | | | | 1,978 | |
| Printing and stock | | | | | | | | | 6,119 | 45 |
| Philosophical, cher | mical, | and n | nath | emati | cal a | ppa | ratus a | nd | | |
| supplies | | | | , | | | | | 1,543 | 44 |
| School census . | | | | | | | | | 1,300 | 00 |
| School census . Stationery and draw | wing n | nateria | als | | | | | | 12,052 | 08 |
| Slates, diplomas, p | encils, | and e | eras | ers | | | | | 3,274 | 87 |
| | | | | | | | | | 300 | 64 |
| Military drill, arm | s, etc. | | | | | | | | 373 | 88 |
| Military drill, arm Janitors' and other | suppli | ies | | | | | | | 4,400 | 96 |
| Car and ferry ticke | ets (ref | unded | l by | State | , \$98 | 1.68 |) . | | 1,368 | 09 |
| Reports of proceed | dings S | chool | Cor | nmitte | ee. | • | | | 300 | 00 |
| Kindergarten supp | lies | | | | | | | | 1,389 | 69 |
| Manual training su | pplies | | | | | | | | 1,386 | |
| Horse and carriage | e expen | ses | | | | | | | 491 | 11 |
| Carriage-hire . | | | | | | | | | 22 | 00 |
| Carriage-hire . Extra elerk-hire . | | | | | | | | | 145 | 50 |
| District telegraph | and tel | ephon | е | | | | | | 293 | 70 |
| Sewing materials | | | | | | | | | 217 | 26 |
| Teaming | | | | | | , | | | 85 | 45 |
| Cost of work for | delivei | | | | | lino | salari | es. | | |
| expenses of tean | | | | | | | | | 5,441 | 67 |
| Sundry items . | | | | | | | | | 109 | |
| | | | | | | | | | **** | |
| Total for supp | olies an | d inci | dent | als | • | • | • | ٠ | \$86,228 | 57 |
| Appropriation "Fu | | | | | | | | | | |
| Fuel | • | • | ٠ | • | • | | 58,120 | | | |
| Gas | | | | • | | | 6,026 | | | |
| Water | • | • | ٠ | • | • | | 5,376 | 80 | | |
| Total for fuel, | gas, a | nd wa | ter | | | • | • | | 69,524 | 54 |
| Gross expendi | ture | | | | | | | | \$155,753 | 11 |

| Gross expenditure | for so | ehool | s, ur | nder tl | ne cl | arge | of | the | |
|---------------------|--------|-------|-------|---------|-------|------|------|-----|--------------|
| Committee on S | Suppli | es | | | | | | | \$155,753 11 |
| Less the following | g cred | its:- | _ | | | | | | |
| Sale of books and s | upplie | es:- | - | | | | | | |
| High Schools . | | | | | | | \$42 | 09 | |
| Grammar Schools | | | | | | | | | |
| Primary Schools | | | | | | | 31 | 75 | |
| Evening Schools | | | | | | | 12 | 53 | |
| Refunded by State, | | | | | | | | | |
| penses pupils, | Horac | е Ма | nn S | School | | | 981 | 68 | |
| | | | | | | | | | 1,119 62 |
| | | | | | | | | | |
| Net expenditure | • | • | • | • | • | • | • | • | \$154,633 49 |

The net amount expended during the year shows a reduction of \$1,053.88 in supplies and incidentals, and \$4,055.73 in fuel, gas, and water — a total reduction of \$5,109.61 as compared with the previous year.

In addition to the reduction in the expenditures, the value of the stock on hand in the storeroom at the close of the year, available for future delivery, increased from \$24,134.79 to \$24,819.99, an increase of \$685.20.

The cost for text-books, exclusive of writing-books and drawing-books, during the past year amounted to \$25,408.15. More than twenty-five per cent. of this expenditure was occasioned by the exchange and introduction of additional text-books adopted by the Board during the year. The principal cost was for —

| 1,840 Myers's General History | | | | | \$1,495 | 50 |
|-----------------------------------|-----|------|-----|--|---------|----|
| 888 Sheldon's General History | | | | | 786 | 64 |
| 600 Brandt's German Reader | | | | | 525 | 00 |
| 11,387 Metcalf's Language Exercis | es | | | | 3,496 | 92 |
| 850 Bradbury & Emery's Academic | Alg | gebi | ca. | | 523 | 80 |
| Total cost for the above | | | | | \$6,827 | 86 |

To apportion the cost of this department among the several grades of schools, it is necessary to divide the expenditures made for items not chargeable to any particular

grade, such as printing, advertising, and similar expenses, pro rata among the different grades.

The following are expenditures of this description: -

| Annual festival . | | | | | | | | \$2,100 | 83 |
|-----------------------|---------|--------|--------|--------|--------|-------|---|----------|----|
| Horses and carriage | | | | | | | | 513 | 11 |
| Advertising | | | | | | | | 300 | 64 |
| Expenses delivering | | | | | | | | 5,441 | 67 |
| Printing, printing-st | tock, b | inding | g, and | post | age | | | 6,727 | 83 |
| Car and ferry ticket | s for n | essen | gers a | and E | . B. j | pupil | S | 386 | 41 |
| Telephone and Distr | rict Te | legrap | oh | | | | | 293 | 70 |
| Transportation, inst | ructor | of mi | litary | drill, | etc. | | | 281 | 88 |
| Tuning and repairing | g piar | os | | | | | | 1,320 | 00 |
| Diplomas | | | | | | | | 1,579 | 86 |
| Express and carting | | | | | | | | 85 | 45 |
| Census, including b | ooks fo | or san | ne | | | | | 1,300 | 00 |
| Extra clerk-hire . | | | | | | | | 145 | 50 |
| Reporting proceeding | ngs of | Schoo | ol Con | nmitte | ee | | | 300 | 00 |
| Washing towels . | | | | | | | | 37 | 89 |
| Sundry items . | | | | | | | | 35 | 12 |
| Total | | | • | | | | | \$20,849 | 89 |

The following shows the net expenditures properly chargeable to the different grades of schools for all items under control of this committee:—

HIGH SCHOOLS.

| Books, drawing mater | rials | s, and | statio | ner | y . | | | | \$10,957 | 93 |
|-----------------------|-------|---------|--------|------|------|-------|--------|-----|----------|----|
| Apparatus and chemic | eals | suppli | es | | | | | | 1,498 | 82 |
| Fuel, gas, and water | | | | | | | | | 9,490 | 27 |
| Janitors' supplies | | | | | | | | | 421 | 99 |
| Miscellaneous items | | | | | | | | | 257 | 67 |
| Proportion of expens | es | not ch | argea | able | to a | ny pa | articu | lar | | |
| school | | | | | | • | | | 3,578 | 66 |
| | | | | | | | | | \$26,205 | 34 |
| Income from sale of l | oool | ks to p | upils | | | | | | 42 | 09 |
| Net cost for High | , Ga | hoola | | | | | | | \$26,163 | 25 |

Average number of pupils belonging, 3,510. Average cost per pupil, \$7.45.

| GRAMMAR SCHOOLS. | |
|--|-------------|
| Books, drawing materials, and stationery | \$32,144 62 |
| Apparatus | 82 09 |
| Fuel, gas, and water | 32,050 26 |
| Janitors' supplies | 2,145 34 |
| Charts, maps, and globes | 320 66 |
| Miscellaneous items | 1,034 66 |
| Proportion of expenses not chargeable to any particular | |
| school | 10,719 80 |
| | \$78,497 43 |
| Income from sale of books to pupils | 51 57 |
| Net cost for Grammar Schools | \$78,445 86 |
| Average number of pupils belonging, 31,675. Average | |
| cost per pupil, \$2.48. | |
| PRIMARY SCHOOLS. | |
| Books, drawing materials, and stationery | \$5,548 69 |
| Apparatus | 62 47 |
| Fuel, gas, and water | 22,616 64 |
| Janitors' supplies | 1,388 11 |
| Miscellaneous items | 1,257 24 |
| Proportion of expenses not chargeable to any particular | |
| school | 4,882 94 |
| | \$35,756 09 |
| Income from sale of books to pupils | 31 75 |
| Net cost for Primary Schools | \$35,724 34 |
| Average number of pupils belonging, 24,035. Average | |
| cost per pupil, \$1.49. | |
| EVENING HIGH AND ELEMENTARY SCHOOLS. | |
| Books, drawing materials, and stationery | \$1,551 99 |
| Fuel and gas | 3,091 48 |
| Janitors' supplies | 42 57 |
| Miscellaneous items | 13 97 |
| Proportion of expenses not chargeable to any particular | |
| school | 743 36 |
| | \$5,443 37 |
| Income from sale of books to pupils | 12 53 |
| Net cost for Evening Schools | \$5,430 84 |
| Average number of pupils belonging, 5,375. Average cost per pupil, \$1.01. | |

EVENING DRAWING SCHOOLS.

| Drawing materials and | d stat | tione | ry | | | | | | \$1,137 | 18 |
|---|--------|--------|---------|-------|--------|-------|--------|---------|---------|----|
| Gas | | | | | | | | | 826 | 07 |
| Janitors' supplies | | | | | | | | | 13 | 54 |
| Miscellaneous items | | | | | | | | | | 16 |
| Proportion of expens | ses n | ot el | arge | able | to a | ny p | artic | ular | | |
| school | | | | | | | | | 312 | 68 |
| | | | | | | | | | | |
| Net cost for Even | ning l | Draw | ing S | Scho | ols | • | • | • | \$2,289 | 63 |
| Average number of cost per pupil, \$3.65. | of pu | apils | belo | ongii | ng, 6 | 328. | Avei | rage | | |
| | нон | RACE | MAN | N SO | сноо | L. | | | | |
| Books, drawing mater | rials, | and | stati | oner | у. | | | | \$65 | 99 |
| Fuel, gas, and water | | | | | | | | | 524 | 78 |
| Janitors' supplies | | | | | | | | | 84 | 41 |
| Travelling expenses of | of pu | pils | | | | | | | 981 | 68 |
| Miscellaneous items | | | | | | | | | 15 | 65 |
| Proportion of expens | ses n | ot el | harge | eable | to a | any j | partic | ular | | |
| school | • | | • | • | • | • | • | | 264 | 53 |
| | | | | | | | | | \$1,937 | 04 |
| Income from State, tr | avell | ing | expe | nses | of pu | pils | | | 981 | |
| | | | | | | | | | | |
| Net cost for Hora | ace M | Iann | Scho | ol | • | • | • | • | \$955 | 36 |
| Average number of per pupil, \$11.24. | ? pup | ils b | elong | ing, | 85. | Ave | rage | cost | | |
| | | KIN | DER | FART | ENS. | | | | | |
| Books, drawing mate | rials | , and | l státi | ioner | У | | | | \$25 | 46 |
| Kindergarten materia | als . | | | | | | | | 830 | 40 |
| Janitors' supplies . | | | | | | | | | 42 | 32 |
| Pianos and stools . | | | | | | | | | 401 | 50 |
| Fuel, gas, and water | | | | | | | | | 301 | 31 |
| Services of maids . | | | | | | | | | . 586 | 50 |
| Miscellaneous items | | | | | | | | | . 12 | 29 |
| Proportion of exper | ises | not | charg | geabl | le to | any | pai | ticular | • | |
| school | | | | | | • | • | | 347 | 92 |
| Net cost for Kine | derga | irten | ıs . | | | | | | \$2,547 | 70 |
| Average number o | f pui | oils k | elone | ging. | . 1.69 | 9. | Avera | age cos | t . | |

Average number of pupils belonging, 1,699. Average cost per pupil, \$1.50.

685 20

. \$154,633 49

| MANUA | L TRA | INING | SCHO | ools. | | | | | |
|-------------------------------|---------|---------|-------|-------|-----|-----|-------|-----------|----|
| Lumber | | | | | | | | \$387 | 69 |
| Hardware | | | | | | | | 82 | 84 |
| Books, drawing materials, a | nd sta | tionery | | | | | | 34 | 06 |
| Crockery, groceries, and kite | chen n | nateria | ls . | | | | | 571 | 00 |
| Miscellaneous | | | | 1. | | | | 185 | 42 |
| | | | | | | • | | 19 | 92 |
| Fuel and gas | | | | | | | | 154 | 55 |
| Net cost for Manual Tra | | | | | | | . \$ | ${1,435}$ | 48 |
| | 0 | | | | | | = | | |
| The pupils attending | | | | | | | | | |
| cluded in the number | belo | nging | to | the | otl | ner | gra | des | of |
| schools. | | 0 0 | | | | | | | |
| SCHOOL CO | OMMIT | TEE A | ND O | FFICE | RS. | | | | |
| Books, drawing materials, an | nd stat | tionerv | | | | | | \$421 | 70 |
| Fuel, gas, and water . | | | | | | | | 469 | |
| Janitors' supplies | | | | | Ì | | | 60 | |
| Miscellaneous items . | | | | • | | | | | 99 |
| | | | | | | | | | |
| Net cost for School Com | mittee | e and C | Hice | rs . | • | | • | \$955 | 83 |
| R | ECAPI' | TULATI | ON. | | | | | | |
| Net cost for supplies pro | perly | charge | eable | to:- | | | | | |
| High Schools | | | | | | | \$26 | 5,163 | 25 |
| Grammar Schools | | | | | | | | 3,445 | |
| Primary Schools | | | | | | | 35 | 5,724 | 34 |
| Evening High and Elementa | | | | | | | | ,430 | |
| Evening Drawing Schools . | | | | | | | | ,289 | |
| Horace Mann School | | | | | | | | 955 | 36 |
| Kindergartens | | | | | | | 2 | 2,547 | 70 |
| Manual Training Schools . | | | | | | | 1 | ,435 | 48 |
| School Committee and Officer | rs . | | | | | | | 955 | 83 |
| | | | | | | | \$153 | ,948 | 29 |
| Stock on hand April 1, 189 | 1 . | | | \$24, | 819 | 99 | , | , | |
| Stock on hand April 1, 1896 | | | | 24, | | | | | |
| 1, | | | | , | | | | | |

The foregoing represents the total net cost of the various grades of schools, exclusive of salaries, and is the expendi-

Stock purchased during the year, but not delivered

Total amount expended

ture made, not only for supplying pupils, but for furnishing the schools with the more permanent material which is constantly being required. It also includes the cost for fuel, gas, and water.

The average cost the past year for supplying pupils attending the various grades with text-books, drawing materials, and stationery, in accordance with the free text-book law, was about 79 cents per pupil.

The number of books charged April 1, 1891, ordered by the principals and used as text-books by the pupils of the different High Schools, was as follows:—

| Normal School | | | 1,470 | Increase for the year, | 6 |
|-------------------------|-----|-------|--------|------------------------|-------|
| Latin School | | | 10,748 | " | 754 |
| Girls' Latin School . | | | 5,043 | 44 | 725 |
| English High School . | | | 11,380 | 66 | 1,314 |
| Girls' High School . | | | 12,492 | 66 | 143 |
| Roxbury High School | | | 6,622 | 44 | 1,275 |
| Charlestown High School | ol. | | 3,152 | 66 | 288 |
| East Boston High School | l . | | 2,376 | 4.6 | 291 |
| Dorchester High School | | | 3,011 | 44 | 158 |
| West Roxbury High Sch | ool | | 1,679 | 66 | 156 |
| Brighton High School | | | 1,561 | 44 | 239 |
| Total number in High | Sch | ools, | 59,534 | Total increase | 5,349 |

The number of text-books charged to the various High Schools would permit the loaning of nearly seventeen books to each pupil.

The text-books charged April 1, 1891, to the several Primary teachers were as follows:—

| | | | Total. | Cost. |
|-----------------------------|--|--|--------|-------------|
| Franklin Adv. First Reader | | | 11,915 | \$1,985 83 |
| " Second Reader . | | | 8,889 | 2,222 25 |
| " Adv. Second Reader | | | 7,984 | 2,395 20 |
| " Third Reader . | | | 9,342 | 3,269 70 |
| First Music Reader | | | 12,547 | 1,806 77 |
| First Lessons in Nat. Hist. | | | 6,064 | 424 48 |
| | | | | |
| | | | 56,741 | \$12,104 23 |

Owing to First Lessons in Natural History and Language being out of print, the number of text-books charged to the Primary Schools shows a reduction of 152, as compared with the previous year.

The following text-books were charged to the Grammar Schools April 1, 1891, having been ordered during the past seven years for the use of the pupils:—

| |] | Increase for Year. | Total. | Cost. |
|-------------------------------|---|--------------------|---------|--------------|
| Franklin Adv. Third Reader | | . 110 | 9,390 | \$3,849 90 |
| " Fourth Reader . | | . 303 | 8,372 | 3,976 70 |
| " Inter. Reader . | | 54 | 6,886 | 3,098 70 |
| " Fifth Reader . | | 218 | 9,910 | 6,937 00 |
| " Sixth Reader . | | 217 | 3,272 | 2,726 67 |
| Worcester's Dictionary . | | 731 | 13,259 | 11,933 10 |
| Higginson's History . | | 148 | 10,097 | 9,087 30 |
| Stone's History of England | | 70 | 2,763 | 1,954 10 |
| Franklin Written Arithmetic | | 883 | 18,798 | 11,748 75 |
| " Elem. Arithmetic | | * 3 | 14,906 | 4,024 62 |
| Small Geography | | * 63 | 16,314 | 6,525 60 |
| Large Geography | | 307 | 19,470 | 17,523 00 |
| Swinton's Lang. Lessons | | 86 | 6,124 | 1,653 48 |
| Cooley's Philosophy . | | 97 | 2,849 | 1,709 40 |
| Inter. Music Reader . | | 187 | 11,917 | 3,813 44 |
| Meservey's Book-keeping | | 239 | 2,502 | 1,200 96 |
| Fourth Music Reader . | | 343 | 8,402 | 5,041 20 |
| Worcester's Spelling-book | | 194 | 22,533 | 4,055 94 |
| First Lessons in Nat. History | | 35 | 3,504 | 245 28 |
| Smith's Physiology | | 188 | 4,416 | 1,806 40 |
| Tweed's Grammar | | 558 | 6,971 | 1,568 47 |
| Normal First Music Reader | | 121 | 2,598 | 695 36 |
| " Second " | | 63 | 6,094 | 3,047 00 |
| " Third " | | 818 | 1,597 | 532 33 |
| National Second " | | 97 | 3,326 | 1,064 32 |
| " Third " | | 29 | 2,006 | 641 92 |
| Metcalf's Language Exercises | | 10,146 | 10,146 | 3,195 99 |
| | | 16,176 | 228,422 | \$113,656 93 |
| | | | | |

^{*} Decrease.

The number of text-books charged to the Grammar Schools permits the loaning of seven books, and would cost to replace about \$3.59 for each pupil.

The number sent to the Evening High School and Branch Schools in Charlestown and East Boston was 3,845. The Evening Elementary Schools called for 7,681 books, making a total of 11,526 books sent to all Evening Schools.

The total number of text-books owned by the city and now in the schools, if replaced at publishers' prices, would cost about as follows:—

| High Schools . | 59,534 1 | oool | ks at a co | st of | | \$42,877 | 74 |
|-----------------|----------|------|------------|-------|--|-----------|----|
| Grammar Schools | 228,422 | 6 6 | 66 | 66 | | 113,656 | 93 |
| Primary Schools | 56,741 | 64 | 66 | " | | 12,104 | 23 |
| Evening Schools | 11,526 | 6.6 | " | " | | 4,400 | 00 |
| Total number | 356,223 | 66 | costing | | | \$173,038 | 90 |

The number of books now charged to the various schools averages between five and six books for each pupil, and, if replaced at publishers' prices, would cost about \$2.68 per pupil.

The past year was the seventh year during which pupils have been supplied under the free text-book law. The success attending the plan of furnishing pupils with everything required for school use has got beyond the experimental stage, and will no doubt remain a permanent feature of the school system of Massachusetts. This being the case, those employed by cities and towns to carry on the work are constantly improving methods by which the best results can be obtained, both as concerns pupils and tax-payers.

The facts herewith presented regarding the cost in detail, the number of books furnished, and those lost and worn out, will show the workings of the plan in Boston since the law went into effect.

1884-85.

| High Schools | | | | . \$6 | 09 p | er pupil. |
|-----------------|--|--|--|-------|------|-----------|
| Grammar Schools | | | | . : | L 57 | " |
| Primary Schools | | | | | 36 | 66 |

| | | 1 | 885 | -86. | | | | | |
|--------------------|---|---|------|------|---|-----|------------|-------|---|
| High Schools . | | | | | | | . \$1 | 05 pe | r pupil. |
| Grammar Schools | | | | | | | . 1 | 35 | " |
| Primary Schools . | | | | | | | | 24 | 66 |
| v | | | | | | | | | |
| | | 1 | 886 | -87. | | | | | |
| High Schools . | • | | | | | • , | . \$2 | 68 pe | r pupil. |
| Grammar Schools | | | | | | | • | 98 | 66 |
| Primary Schools . | | | | | | | | 17 | 66 |
| | | | | | | | | | |
| | | 1 | 887 | -88. | | | | | |
| High Schools . | • | | | | • | | . \$2 | 33 pe | r pupil. |
| Grammar Schools | | | | | | | • | 98 | 66 |
| Primary Schools . | | | | | • | | | 19 | " |
| | | | | | | | | | |
| ~~ ~ | | 1 | .888 | -89. | | | | | |
| High Schools . | • | • | • | ٠ | • | • | | | er pupil. |
| Grammar Schools | • | • | • | • | • | • | . 1 | 05 | 66 |
| Primary Schools . | • | • | • | • | • | • | • | 21 | 66 |
| | | _ | 000 | 00 | | | | | |
| TT' 1 () 1 1 | | 1 | .889 | -90. | | | * • | 20 | • |
| High Schools . | • | • | • | • | • | • | . \$2 | | r pupil. |
| Grammar Schools | • | • | • | • | • | • | • | 89 | 6.6 |
| Primary Schools . | • | • | • | • | • | • | • | 20 | " |
| | | 1 | 890 | -91. | | | | | |
| High Schools . | | | | | | | . \$3 | 11 pe | r pupil. |
| Grammar Schools | | | | | | | | 01 | " |
| Primary Schools . | | | | | | | | 23 | 66 |
| 2222223 30110015 . | • | · | • | • | • | · | • | 20 | |

The average cost per pupil for the various grades each year for the past seven years was as follows:—

| High Schools | | | | | . \$3 | 38 p | er pupil. |
|-----------------|--|--|--|---|-------|------|-----------|
| Grammar Schools | | | | • | . 1 | 12 | 66 |
| Primary Schools | | | | | | 23 | 66 |

The average cost for supplying books, drawing materials, and stationery each year for the past seven years was 85 cents per pupil.

The number of books reported lost during the year was as follows:—

| High School | ds . | | | | | | | | 101 |
|-------------|--------|-------|---------|--------|------|-------|-----|--|---------|
| Grammar S | chools | | | | | | | | 394 |
| Primary Sc | hools | | | | | | | | 379 |
| Evening Sc | hools | | | | ٠ | | | | 403 |
| Total | l numk | er re | eported | l lost | | • | | | 1,277 |
| In 1889–90 | the nu | mber | was | | | | | | 1,065 |
| " 1888–89 | 6.6 | 66 | 6.6 | | | | | | 749 |
| ·· 1887–88 | " | " | 66 | | | | | | 662 |
| ·· 1886–87 | " | 66 | 6. | | | | | | 664 |
| ·· 1885–86 | 66 | 66 | 66 | | | | | | 731 |
| Total | numb | er of | book | s lost | in s | ix ye | ars | | 5,148 |

The number of books returned from the schools as worn out during the year was as follows:—

| High Scho | ols | | | | | | | | | 1,201 |
|------------|-------|---------|---------|---------|--------|-------|-------|----|--|---------|
| Grammar S | Scho | ools | | | | | | | | 18,828 |
| Primary So | ehoc | ols | | • | | | | | | 9,175 |
| Tota | ıl nı | ımber 1 | returne | ed as v | vorn (| out | | | | 29,204 |
| In 1889-90 | the | numbe | er was | | | | | | | 23,566 |
| ·· 1888–89 | 66 | 66 | " | | | | | | | 25,397 |
| ·· 1887–88 | 6 6 | 6.6 | 6.6 | | | | | | | 14,399 |
| ·· 1886–87 | 66 | 6.6 | 6.6 | | | | | | | 6,398 |
| ·· 1885–86 | 66 | 66 | | | | | | | | 3,582 |
| Tota | l nu | ımber (| of wor | n-out l | books | in si | x yea | rs | | 102,546 |

Since August, 1884, when the free text-book law went into effect, the schools have been supplied with 463,917 books. Of this number less than twenty-four per cent. (107,694) have been reported as lost or worn out, indicating that books will last much longer than was expected. The cost of furnishing books free to all the pupils adds about two per cent. to the cost of instruction.

The cost for supplementary reading the past year was \$3,400.01. The supply of circulating reading for the

Grammar Schools was largely increased, and at the present time consists of 165 sets of 30 books each. This arrangement permits the use of three sets at the same time in each school, and, as the books are moved from school to school three times during the year, each school gets the use of nine different sets. About 200 sets of primary supplementary reading are in circulation among the first and second classes of the Primary Schools, the sets being changed each month. In addition to the circulating supplementary reading, the High and Grammar Schools and the lowest classes in the Primary Schools were furnished with such permanent supplementary reading as the appropriation would warrant.

During the year two upright pianos were purchased from the Henry F. Miller & Sons Piano Co., at an expense of \$450.00, and were sent to the Gibson School and the Prince Kindergarten. In addition, a square piano was purchased from the Ivers & Pond Piano Co., at a cost of \$174.00, and sent to the George Putnam Kindergarten.

The Perkins Institution attended to the tuning and care of the pianos for the sum of \$1,320.00.

The 157 pianos now in the schools represent a cost of about \$49,000.00, and are distributed among the various grades as follows:—

| High Schools | | | | | | | 13 |
|-----------------|-------|------|--|--|--|--|-----|
| Grammar Schools | | | | | | | 59 |
| Primary Schools | | | | | | | 64 |
| Kindergartens | • | | | | | | 21 |
| | | | | | | | _ |
| Total number of | f pia | anos | | | | | 157 |
| | | | | | | | |

The last report of the tuner stated that, with few exceptions, the pianos are in good or fair condition.

The expenses of the Annual Festival the past year were as follows:—

| Rent of Mecha | nies' | Hall | | | | | | \$250 00 |
|----------------|-------|-------|--------|-----|---|---|--|------------|
| Band | | | | | | | | 104 00 |
| Bouquets . | | | | | • | | | 960 00 |
| Collation . | | | | | | | | 634 00 |
| Transportation | | | | | | | | 112 19 |
| Sundry items | | | | | | | | 40 64 |
| Total cost of | Ann | ual F | estiva | al. | | • | | \$2,100 83 |

During the past year the public schools used 11,352 tons of coal, as compared with 11,160 tons the previous year. The average cost was \$4.85 per ton. In addition, 196 cords of wood were required, at an average cost of \$11.34 per cord. The total expense for fuel, including \$737.79 for inspecting, weighing, and receiving the coal, amounted to \$58,120.79, as compared with \$63,013.97 paid the previous year.

The gas cost \$6,026.95, as compared with \$5,559.78 in 1889-90. The cost for gas has increased at the rate of about ten per cent. each year, for the past three or four years. A large part of the gas is used in the Evening and Evening Drawing Schools; but nearly all of the school buildings have gas for the use of the janitors, and in many cases it has been introduced into the school-rooms, where the practice of lighting up on dark days is increasing. The cost for gas in the Latin and English High School building was \$1,297.27. In this building are located the Evening High School and an Evening Drawing School.

The cost for water the past year was \$5,376.80, as compared with \$5,006.52 the previous year. In order to show the differences in the amount of water used in the various schools, the following table is presented, showing the cost at meter rates:—

The cost for water used in the eight High School buildings during the year was as follows:—

| Latin and English High . \$ | 500 40 | Roxbury High . | | \$49 00 |
|-----------------------------|--------|------------------|---|--------------|
| West Roxbury High | 125 50 | East Boston High | | 30 80 |
| Girls' High | | | | |
| Dorchester High | 56 00 | Brighton High . | • | 4 20 |
| | | • | | |
| Total for High Schools | | | | \$859 60 |

The cost for the fifty-five Grammar School buildings was as follows: -

| Hugh O'Brien . | | | . 8 | \$241 20 | Allston . | | | | | \$29 | 40 |
|-----------------|----|-----|-----|----------|-------------|----|---|-----|-----|-------|----|
| Thomas N. Hart | | | | 196 90 | Dudley . | | | | | 29 | 40 |
| Mather | | | | 185 40 | Bunker Hill | | | | | 28 | 00 |
| Hyde | | | | 133 00 | Dwight . | • | | | | 28 | 00 |
| Martin | | | | 122 80 | Eliot | | | | | 26 | 60 |
| Rice | | | | 122 60 | Phillips . | | | | | 26 | 60 |
| Minot | | | | 106 80 | Prescott . | | | | | 26 | 60 |
| Harvard | | | | 101 10 | Comins . | | | | | 22 | 40 |
| John A. Andrew | | | | 97 20 | Charles Sum | er | | | | 19 | 60 |
| George Putnam | | | | 86 80 | Bowdoin . | | | | | 18 | 20 |
| Prince | | | | 78 40 | Lyman . | | | | | 18 | 20 |
| Frothingham . | | | | 72 40 | Chapman | | | | | 16 | 80 |
| Everett | | | | 64 40 | Emerson . | | | | | 16 | 80 |
| Sherwin | | | | 64 40 | Warren . | | | | | 16 | 80 |
| Henry L. Pierce | | | | 62 80 | Lawrence | | | | ٠ | 14 | 00 |
| Franklin | | | | 51 80 | Lincoln. | | | | | 14 | 00 |
| Dearborn | | | | 50 40 | Lowell . | | | | | 12 | 60 |
| Dillaway | | | | 47 60 | Agassiz . | | ٠ | ٠ | | 9 | 80 |
| Hancock | | | | 47 60 | Gibson . | | ٠ | | ٠ | 9 | 80 |
| Wells | | | | 44 80 | Lewis | | | | ٠ | 9 | 80 |
| Gaston | | | | 43 40 | Adams . | | | | | 8 | 40 |
| Hillside | | | | 43 40 | Norcross . | | | | | 8 | 40 |
| Shurtleff | | | | 42 00 | Winthrop | | | | | 8 | 40 |
| Edward Everett | | | | 37 80 | Bennett . | | | . ' | | 7 | 00 |
| Bigelow | | | | 36 40 | Stoughton | | | | | 4 | 20 |
| Quincy | | | | 32 20 | Tileston . | | | | | 4 | 20 |
| Brimmer | | | | 30 80 | Mount Verno | n | | | | 2 | 80 |
| Harris | | | | 30 80 | | | | | | | |
| Total for Gra | mn | nar | S | chools . | | | | | \$: | 2,712 | 00 |

The eleven Primary School buildings metered cost as follows: -

| Harvard Hill | Polk Str Bunker East Str Walnut Bartlett | Hill S eet Stree | Street | | . 9 | 00 40 80 00 60 |
|-----------------------------------|--|------------------------|---------|----|-----------------|----------------------------|
| Total | | | | | . \$614 | 10 |
| The aggregate cost was as fe | ollows: | | | | | |
| High Schools metered | | | | | \$859 | 60 |
| Grammar Schools metered | | | | | 2,712 | 00 |
| Primary Schools metered | | | | | 614 | 10 |
| Horaee Mann School metered (new | building) | | | | 37 | 80 |
| Total for buildings metered . | | | | | \$4,223 | 50 |
| 93 Primary Schools, not metered | | | \$1,084 | 05 | | |
| Horace Mann School (old building) |) | | 23 | 80 | | |
| Sehool Committee Rooms | | | 40 | 95 | | |
| North Margin Street Kindergarten | | | 4 | 50 | | |
| | | | | | \$1,1 53 | 30 |
| Total cost for water | | • | • | ٠ | \$5,376 | 80 |

Attention is called to the statement on the following page of this report, giving in detail the expenses of this committee for the past twelve years, exclusive of fuel, gas, and water. For the past year, the cost for books, drawing materials, and stationery was 79 cents per pupil, and for miscellaneous items, such as printing, janitors' supplies, the annual school festival, etc., was 48 cents per pupil, making a total cost of \$1.27, as compared with \$1.31 for the previous year.

Respectfully submitted,

R. D. ELLIOTT, Chairman, RICHARD C. HUMPHREYS, CHAS. E. DANIELS, FRED G. PETTIGROVE, JAMES S. MURPHY,

Committee on Supplies.

Net Expenditures of the School Committee for the past Twelve Years, exclusive of the Amounts paid for Eucl, Gas, and Water.

| | | - | | | | | , | | | | | |
|-------------------------------|--------------|-------------|-------------|-------------|----------------------------|--------------|-------------|-------------|-------------|-------------|--|-------------|
| | 1879-80. | 1880-81. | 1881-82. | | 1882-83. 1883-84. 1884-85. | 1884-85. | | 1886-87. | 1887-88. | 1888-89. | 1885-86, 1886-87, 1887-88, 1888-89, 1889-90, 1890-91 | 1890-91. |
| No. of Pupils . | 53,981 | 54,712 | 55,638 | 57,554 | 58,788 | 59,706 | 61,259 | 62,259 | 62,226 | 64,584 | 66,003 | 67,022 |
| Books, Stat., Draw. Mat'l | \$76,621 67 | \$21,003 26 | \$7,569 57 | \$15,309 74 | \$14,107 76 | \$80,779 82 | \$58,760 77 | \$42,890 13 | \$43,721 29 | \$46,087 54 | \$50,182 82 | \$52,988 28 |
| Printing | 8,292 03 | 7,401 84 | 7,403 57 | 4,885 23 | 5,471 94 | 5,614 66 | 5,319 25 | 4,620 81 | 4,775 89 | 5,708 14 | 5,448 40 | 6,119 45 |
| Apparatus | 4,479 45 | 5,033 33 | 3,241 91 | 897 19 | 871 56 | 1,230 38 | 1,807 02 | 1,035 15 | 1,356 27 | 1,249 06 | 2,179 39 | 1,543 44 |
| Slates, etc | 882 77 | 3,329 37 | 1,508 46 | 992 76 | 2,008 12 | 1,706 08 | 2,142 32 | 1,818 95 | 1,647 41 | 1,648 66 | 2,209 58 | 1,695 01 |
| Pianos, etc | 1,213 00 | 1,321 00 | 1,760 50 | 2,045 50 | 1,269 00 | 1,771 00 | 2,048 50 | 1,597 50 | 1,503 50 | 1,846 25 | 3,070 50 | 1,978 00 |
| Festival | 2,009 67 | 1,975 49 | 1,890 24 | 1,907 34 | 2,837 98 | 1,834 17 | 1,949 19 | 1,821 18 | 1,906 67 | 2,104 14 | 2,380 04 | 2,100 83 |
| Janitors' Sup | 1,822 63 | 6,490 63 | 3,038 91 | 2,906 65 | 3,037 15 | 3,138 63 | 3,406 21 | 3,115 70 | 3,364 25 | 3,494 41 | 4,151 18 | 4,400 96 |
| Census | 1,620 40 | 1,042 75 | 943 45 | 902 00 | 935 00 | 1,003 00 | 1,094 90 | 999 50 | 1,024 50 | 1,074 50 | 1,099 50 | 1,300 00 |
| Teaming | 1,493 90 | 622 15 | 227 09 | 243 72 | 178 42 | 182 39 | 87 43 | 48 55 | 118 811 | 64 24 | 167 47 | 85 45 |
| Advertising | 821 42 | 617 29 | 442 93 | 202 05 | 222 48 | 265 69 | 245 88 | 238 47 | 172 37 | 206 69 | 252 97 | 300 64 |
| Maps, etc | 110 50 | 637 10 | 746 43 | 662 26 | 836 14 | 716 03 | 639 30 | 720 09 | 592 10 | 2,304 56 | 1,324 21 | 459 39 |
| Deliveries | 00 000'6 | 12,000 00 | 12,000 00 | 12,000 00 | 12,000 00 | 7,040 83 | 5,160 00 | 4,820 01 | 4,852 89 | 4,954 50 | 5,279 00 | 5,441 67 |
| Miscellaneous. | 4,875 58 | 4,088 72 | 4,015 27 | 3,900 87 | 3,191 00 | 3,379 29 | 3,156 00 | 2,862 15 | 3,493 66 | 4,060 70 | 5,464 78 | 3,919 34 |
| | \$113,243 02 | \$65,562 93 | \$44,788 33 | \$46,858 31 | \$46,966 55 | \$108,661 97 | \$85,816 77 | \$66,588 19 | \$68,529 61 | \$74,803 39 | \$83,189 84 | \$82,332 46 |
| Guns, etc | : | : | • | : | : | 9,462 00 | : | • | | : | 716 75 | : |
| Manual Tr'g . | : | : | | : | : | : | 1,711 53 | 515 35 | 641 26 | 885 14 | 1,056 59 | 1,386 80 |
| Kindergartens, | : | : | : | : | : | | : | : | : | 1,719 44 | 1,199 65 | 1,389 69 |
| Total net ex. } | \$113,243 02 | \$65,562 93 | \$44,788 33 | \$46,858 31 | \$46,966 55 | \$118,123 97 | \$87,528 30 | \$67,103 54 | \$69,170 87 | \$77,407 97 | \$86,162 83 | \$85,108 95 |
| Average cost / per pupil . \$ | \$2 10 | \$1 20 | \$0.80 | 18 0\$ | \$0 80 | \$1 98 | \$1 43 | \$1 08 | \$1 11 | \$1 20 | \$1 31 | \$1.27 |
| | | - Long | | | | | | | | | | |

The total amount expended during the year, \$155,753.11, was paid to the following-named parties:—

| H. G. Jordan & Co., \$5 | 3,511 29 | Brought forward, \$134,593 77 |
|-------------------------|-----------|--------------------------------|
| American Book Co | | Allyn & Bacon 529 00 |
| Pulsifer, Jordan, & | | East Boston Gas Co 519 32 |
| | 6,025 70 | Leach, Shewell, & San- |
| | 5,563 30 | born 476 26 |
| | 5,550 57 | Johnson & Morrison . 476 14 |
| Services in storeroom. | 5,441 67 | South Boston Gas-Light |
| Prang Educational Co., | 5,193 39 | Co 474 12 |
| | 4,530 63 | A. R. Dunton 467 70 |
| Rockwell & Churchill . | 3,890 70 | Houghton, Mifflin, & |
| Lee & Shepard | 3,525 40 | Co 463 36 |
| Boston Gas-Light Co | 3,204 37 | Henry F. Miller & Sons |
| Geo. S. Perry | 2,975 30 | Piano Co 450 00 |
| Carter, Rice, & Co | 2,718 77 | Carl Schoenhof 443 18 |
| Cowperthwait & Co | 2,624 64 | Charles F. Shourds & |
| Overseers of the Poor . | 2,222 16 | Co 426 81 |
| George M. Winslow & | | C. J. Enebuske 390 00 |
| Co | 1,569 55 | Proctor & Drummey . 373 35 |
| | 1,470 44 | Bradley & Woodruff . 365 48 |
| Perkins Institution | 1,320 00 | Henry Holt & Co 363 45 |
| | 1,300 00 | Carter, Dinsmore, & |
| William Ware & Co | 1,299 99 | Co 349 56 |
| Jos. Dixon Crucible Co. | 1,252 11 | Cutler Bros. & Co 346 20 |
| | 1,105 31 | Educational Supply Co., 344 29 |
| John P. Dale & Co | 1,021 20 | Boston Transcript Co 331 38 |
| | 981 68 | Boston School Supply |
| | 911 44 | Co 328 42 |
| Amer. Bank Note Co | 887 25 | Effingham Maynard & |
| Thompson, Brown, & | | Co 321 55 |
| Co | 825 22 | J. L. Hammett & Co 320 67 |
| Murphy, Leavens, & | | Emery & Greenwood . 307 37 |
| Co | 809 08 | S. Y. L'Hommedieu |
| F. Weber & Co | 788 50 | Co 278 96 |
| Roxbury Gas-Light Co., | 690 61 | N. E. Telephone & |
| Frost & Adams | 679 41 | Telegraph Co 278 10 |
| Samuel Hosea, Jr | 663 13 | Brooks, Baldwin, & |
| William Tufts | 634 00 | Robbins 276 50 |
| United States | 606 00 | Samuel Hobbs & Co 273 04 |
| Wakefield Rattan Co | 604 91 | A. Worcester & Sons . 253 50 |
| Carried forward, \$13 | 34,593 77 | Carried forward, \$144,821 48 |

| Brought forward, \$14 | 14.821 48 | Brought forward, \$150 | 801 45 |
|-------------------------|-----------|--------------------------|----------|
| Mass.Char.Mech.Ass'n, | 251 50 | Lalance & Grosjean | ,001 10 |
| Willard Small | 236 36 | Manufacturing Co | 94 29 |
| J. W. C. Gilman & Co. | 235 20 | Amabel G. E. Hope . | 93 61 |
| Shepard & Samuel | 225 56 | Estes & Lauriat | 91 60 |
| Cutter Tower Co | 222 50 | Brookline Gas-Light | 01 00 |
| J. Fred. Sayer, Jr | 206 61 | Co | 91 01 |
| C. C. Weily | 200 00 | Thorp & Adams Manu- | 31 01 |
| Heliotype Printing Co., | 187 34 | facturing Co | 84 23 |
| A. & E. Burton & Co., | 177 70 | B. V. Maxwell | 82 41 |
| Ivers & Pond Piano Co. | 176 50 | Whitall, Tatum, & Co., | 79 82 |
| Richard Thompson Co. | 170 79 | D. Appleton & Co | 79 47 |
| Mrs. C. N. S. Horner . | 170 00 | Charles A. Neuert | 78 66 |
| Baldwin's Boston Cadet | 2,000 | Julia M. Murphy | 76 81 |
| Band | 169 00 | South Boston Savings | 10 01 |
| Hobart Moore | 167 00 | Bank | 75 00 |
| Harper & Bros | 165 49 | Harriet I. Davis | 74 65 |
| Edmands & Hooper . | 165 36 | Eberhard Faber | 72 00 |
| J. P. Clark | 160 00 | Boston Woven Hose Co. | 71 10 |
| James Delay | 160 00 | Cobb, Bates, & Yerxa. | 69 40 |
| J. Newman & Sons . | 160 00 | H. C. Kendall | 67 10 |
| Norton Bros | 160 00 | Pulsifer, Jordan, & Co., | 65 51 |
| Otis Clapp & Son | 155 46 | Roberts Bros | 64 98 |
| William Read & Sons . | 137 63 | Wheeler, Blodgett, & | |
| P. Lynam & Sons | 135 36 | Co | 64 57 |
| DeWolfe, Fiske, & Co. | 132 81 | E. A. Power | 63 00 |
| Charles C. Gerry | 130 00 | John T. Randolph | 60 00 |
| Revere Rubber Co | 125 50 | Paul A. Garey & Co | 58 00 |
| J. Mooney | 120 00 | Mass. Bible Society . | 57 60 |
| W. J. Stokes | 120 00 | Ames Plow Co | 56 62 |
| J. B. Lippincott Co | 119 20 | Althea W. Somes | 55 58 |
| William F. Chester | 115 49 | Mrs. E. F. Bethmann . | 48 00 |
| Amos M. Keirstead . | 108 77 | Post Publishing Co | 47 60 |
| Brown, Durrell, & Co. | 106 48 | Caroline J. Duff | 46 55 |
| Joseph Watrous | 105 00 | Lizzie Harrison | 46 00 |
| West End St. Railway | | Dame, Stoddard, & Ken- | |
| Со | 103 95 | dall | 44 70 |
| Jamaica Plain Gas- | | Wadsworth, Howland, | |
| Light Co | 102 98 | & Co | 44 04 |
| Charles H. Stephan . | 100 04 | Mary T. Hale | 44 00 |
| Thomas H. Meade | 100 00 | H. Annie Coakley | 43 00 |
| Twombly & Sons | 100 00 | Engraving Electrotype | |
| Silver, Burdett, & Co., | 94 39 | Agency | 42 50 |
| Carried forward, \$1 | 50,801 45 | Carried forward, \$155 | 3,034 86 |

| Brought forward, \$153 | 1 034 86 | Brought forward, \$154,344 80 | e |
|----------------------------------|-------------------------------|---------------------------------|---|
| Annie Regan | 42 25 | George H. Monroe 25 00 | |
| Eva Wulf | $\frac{42}{42} \frac{25}{25}$ | Annie Leverone | |
| Lasker Bros | 41 84 | Andrew E. Perkins 23 56 | |
| Longmans, Green, & | 41 04 | Charles W. Sever 23 20 | |
| Longmans, Green, & | 41 00 | Boston Ice Co 25 20 | |
| Co | 40 85 | Boston Cab Co | |
| Library Bureau Chandler & Barber | 40 80 | | |
| Harrison Hume | | Robert J. Haines 22 00 | U |
| | 40 80 | Beal, Higgins, & Hen- | , |
| Boston Daily Adver- | 40 01 | derson 21 64 | 4 |
| tiser | 40 21 | American Humane Edu- | ^ |
| A. C. Stockin | 40 10 | cational Society 21 60 | |
| Journal Newspaper Co. | 40 01 | Boston Evening Record, 21 50 | U |
| Mrs. S. A. Wetherbee . | 37 89 | Hartford Machine Screw | _ |
| Kate C. Winship | 36 90 | Co 21 50 | |
| John Gilbert Jr. & Co., | 36 52 | Josephine Morris 21 2: | |
| T. H. Reynolds & Co | 36 05 | Francis Sargent & Co., 21 15 | |
| Boston Herald Co | 35 13 | Edward P. Jackson . 20 98 | |
| Patrick Lally & Co | 35 00 | Mattie J. Smith 20 78 | |
| Edward E. Babb & Co. | 34 36 | Adeline L. Sylvester . 20 3: | |
| Gilman Joslin & Son . | 33 33 | R. Beeching & Co 20 00 | |
| Dorchester Gas-Light | | Louisa Baumann 19 28 | |
| Co | 33 10 | Clara L. Osborne 19 00 | 0 |
| Alice G. Holmes | 33 00 | Thomas B. Noonan & | |
| Traveller Newspaper | | Co 18 40 | |
| Co | 32 66 | Ellen L. Duff 18 17 | |
| George H. Barton | 32 65 | A. G. Cheever 17 50 | |
| Steamship "Parthia," | 31 78 | Mrs. M. A. Chandler . 17 00 | |
| Globe Newspaper Co | 31 75 | Carlotina Carrabbio . 16 50 | |
| E. M. Cundall | 31 50 | George Jepson 16 11 | |
| F. A. Waterhouse | 31 50 | Joseph E. Ballou 16 00 | |
| Mary A. H. Fuller | 30 98 | Daniel G. Joy, Jr 16 00 | |
| Alex L. Goode | 30 00 | Bigelow & Dowse 15 50 | 0 |
| Susan Leverone | 29 25 | Boyce Brothers 15 50 | 0 |
| Bridget O'Donnell | 29 25 | Maggie Conley 15 25 | 5 |
| Maggie Decourcy | 28 25 | Bufford's Sons Lith. Co. 15 00 | 0 |
| A. J. Wilkinson & Co., | 27 54 | Isabella Hyslop 15 00 | 0 |
| Theresa G. Power | 27 00 | Mary Leverone 15 00 | 0 |
| Annie S. Werner | 27 00 | South Boston Broom & | |
| Thomas Groom & Co | 26 25 | Brush Mfg. Co 15 00 | 0 |
| Mary Lavazola | 25 75 | Spencerian Pen Co 15 00 |) |
| Mary E. Rodden | 25 50 | Sundry bills less than | |
| Florence Dix | 25 00 | \$15 740 45 | 5 |
| Nathaniel S. French . | 25 00 | | |
| Carried forward, \$154 | ,344 86 | Total expenditure, \$155,753 11 | L |

TARIFF OF SUPPLIES.

The following tariffs for High and Grammar Schools show the average amount of each article requested, according to the estimates submitted by the principals: -

HIGH SCHOOLS.

| | | | | | PUPI | LS. | | | | |
|--------------|-----------|------|--------|-------|--------|-----|-------------------------------|--|--|--|
| Examination | Pap | er | | | | | 12 reams to each 100 pupils. | | | |
| Letter Paper | · . Î | | | | | | 12 reams to each 100 pupils. | | | |
| Note Paper | | | | | | | 12 reams to each 100 pupils. | | | |
| Composition | | | | | | | 7 to each pupil. | | | |
| Pens . | | | | | 22. | | 11 gross to each 100 pupils. | | | |
| Penholders | | | | | | | 1½ gross to each 100 pupils. | | | |
| Drawing Per | ncils | | | | | | 4 to each pupil. | | | |
| Common Per | | | | | | | 5 to each pupil. | | | |
| Rubber. | | | | | | | 3½ pieces to each pupil. | | | |
| Blotters | | | | | | | 300 to each 100 pupils. | | | |
| | | | | | | | | | | |
| | TEACHERS. | | | | | | | | | |
| Letter Paper | ٠. | | | | | | 4 quires to each teacher. | | | |
| Note Paper | | | | | | | 6 quires to each teacher. | | | |
| Note Envelo | pes | | | | | | 4 packages to each teacher. | | | |
| Pens . | | | | | | | 1 gross to each 10 teachers. | | | |
| Mucilage | | | | | | | 1 bottle to each teacher. | | | |
| Blotters | | | | | | | 1 package to each teacher. | | | |
| Penholders | | | | | | | 3 to each teacher. | | | |
| Drawing Per | ncils | | | | | | 5 to each teacher. | | | |
| Common Per | ncils | | | | | | 5 to each teacher. | | | |
| Rubber. | | | | | | | 3 pieces to each teacher. | | | |
| | Ea | ch p | rincij | pal e | quival | ent | to two teachers. | | | |
| | | | | | | | | | | |
| | | | | | SCHOO | LS. | | | | |
| Ink . | | | | | | | 4 gallons to each 100 pupils. | | | |
| Chalk . | | | | | | | 9 boxes to each 100 pupils. | | | |

| Ink | | | | | | | | 4 gallons to each 100 pupils. |
|---------|-----------------------------|-------|-------|-----|-------|--------|------|--------------------------------|
| Chalk | | | | | | | | 9 boxes to each 100 pupils. |
| Blackb | oard | Eras | ers | | | | | 20 to each 100 pupils. |
| Recitat | ion C | Cards | | | | | | 450 to each 100 pupils. |
| | | | | | | | | 2 quarts to each building. |
| Large | $\stackrel{\circ}{ m Enve}$ | lopes | | | | | | 100 to each building. |
| Inkstar | nds a | nd R | acks, | Rec | ord B | Books, | A | oparatus, Drawing Instruments, |
| 31 | ~ C1. | -1 | O1 | 4 4 | | | a 1. | 4h Camana: 44 |

Maps, Globes, Charts, etc., as voted by the Committee.

GRAMMAR SCHOOLS.

PUPILS.

| Examination Paper . | | | 2½ reams to each 100 pupils. |
|--------------------------|---------|--|-------------------------------|
| Letter Paper | | | 4 reams to each 100 pupils. |
| Note Paper | | | 28 quires to each 100 pupils. |
| Composition Books . | | | 2¾ to each pupil. |
| Pens | | | 9 gross to each 100 pupils. |
| Penholders | | | 1½ gross to each 100 pupils. |
| Drawing Pencils | | | 2½ to each pupil. |
| Common Pencils | | | 2½ to each pupil. |
| Rubber | | | 2½ pieces to each pupil. |
| Drawing Paper for Maps | s, etc. | | 3 reams to each 300 pupils. |
| Blank Books for Spelling | g . | | 165 to each 100 pupils. |
| Blotters | | | 2½ to each pupil. |
| Slate Pencils | | | 7½ to each pupil. |
| | | | |

TEACHERS.

| Letter Paper. | | | | 3 | quires to each teacher. |
|---------------|------|--|----|----------------|----------------------------|
| Note Paper . | | | | 5 | quires to each teacher. |
| Note Envelop | es | | •. | $3\frac{1}{2}$ | packages to each teacher. |
| Penholders . | | | | $2\frac{1}{2}$ | to each teacher. |
| Drawing Pend | eils | | | 3 | to each teacher. |
| Common Pend | cils | | | 4 | to each teacher. |
| Rubber | | | | 2 | pieces to each teacher. |
| Pens | | | | 1 | gross to each 10 teachers. |
| Mucilage . | | | | 1 | bottle to each teacher. |
| Blotters . | | | | 1 | package to each teacher. |
| | Ea | | | | vo teachers. |

SCHOOLS.

| Ink | | | | | | | | 3 gallons to each 100 pupils. |
|---------|-------|------|--------|-----|----------------------|--------|----|--------------------------------|
| Chalk | | | | | | | | 5 gross to each 100 pupils. |
| Blackb | oard | Era | sers | | | | | 12 to each 100 pupils. |
| Slates | | | | | | | | 40 to each 100 pupils. |
| Recitat | ion (| Card | .s . | | | | | 220 to each 100 pupils. |
| Mucila | ge | | | | | | | 1 quart to each building. |
| Large | Enve | lope | es . | | | | | 100 to each building. |
| Inkstar | nds a | nd | Racks, | Rec | ord | Books, | Ap | pparatus, Drawing Instruments, |

Maps, Globes, Charts, etc., as voted by the Committee.

PRIMARY SCHOOLS.

PUPILS.

Slate Pencils, Lead Pencils, Rubber, and Paper, as wanted.

TEACHERS.

| 1 quire Letter Paper. | 2 pieces Rubber. |
|----------------------------|----------------------------------|
| 4 ream Note Paper. | 4 Common Lead Pencils. |
| 10 Large Envelopes. | 2 Penholders. |
| 2 packages Note Envelopes. | 15 Pens. |
| 1 small bottle Mucilage. | 1 qtbottle Ink to each building. |

SCHOOLS.

| Chalk | | | | | | | | 3 gross to | each 100 | pupils. |
|----------|-------|-------|-------|-------|-------|---------|-----|--------------|-----------|---------|
| Slates | . " | | | | | | | 50 to each 1 | .00 pupil | s. |
| Inkstand | ds an | d R | acks, | Reco | ord I | Books, | Pri | mary-school | Paper, | Charts, |
| Black | board | l Era | sers, | etc., | as vo | oted by | the | Committee. | | |

Requisitions of the Committee on Supplies to the Committee on Accounts: -

| 1890. | | Fuel, Gas, and Water. | Incidentals. | Total. |
|----------------|---|-----------------------|--------------|--------------|
| May . | | \$3,047 40 | \$2,242 43 | \$5,289 83 |
| June . | | 1,152 78 | 9,236 88 | 10,389 66 |
| July | | 339 95 | 7,084 71 | 7,424 66 |
| August . | | 17,622 83 | 7,747 77 | 25,370 60 |
| September | | 25,830 28 | 24,335 11 | 50,165 39 |
| October . | | 4,949 46 | 8,058 71 | 13,008 17 |
| November | • | 1,564 78 | 5,273 88 | 6,838 66 |
| December 1891. | | 667_08 | 3,654 07 | 4,321 15 |
| January . | | 1,177 83 | 3,125 64 | 4,303 47 |
| February . | | 5,316 60 | 4,578 58 | 9,895 18 |
| March | | . 4,623 18 | 5,928 13 | 10,551 31 |
| April | | 3,232 37 | 4,962 66 | 8,195 03 |
| Totals . | | \$69,524 54 | \$86,228 57 | \$155,753 11 |

COMPARATIVE STATEMENT OF EXPENDITURES FOR THIRTEEN YEARS.

| Year. | Amo | vunts. | Average No. of Pupils. | Average Cost per Pupil. |
|---------------------|--------------|--------------|---------------------------|----------------------------|
| 1878-79 | \$159,428 97 | | | |
| Less repaid to city | 406 35 | #150 000 00 | F0 000 | #9.00 |
| 1879–80 | \$179,998 99 | \$159,022 62 | 53,262 | \$2 99 |
| Less repaid to city | 25,835 75 | 154 162 94 | 52 001 | 2 86 |
| 1880–81 | \$170,910 95 | 154,163 24 | 53,981 | 2 00 |
| Less repaid to city | 47,864 40 | 123,046 55 | 54,712 | 2 25 |
| 1881–82 | \$146,171 07 | 125,040 55 | 34,712 | 2 23 |
| Less repaid to city | 43,789 57 | 102,381 50 | 55,638 | 1 84 |
| 1882-83 | \$151,791 02 | 102,561 50 | 55,056 | 1 04 |
| Less repaid to city | 44,069 60 | 107,721 42 | 57,554 | 1 87 |
| 1883–84 | \$161,987 58 | 101,121 42 | 91,994 | 1 01 |
| Less repaid to city | 48,952 44 | 113,035 14 | 58,788 | 1 92 |
| 1884-85 | \$188,154 07 | 115,055 14 | 50,100 | 1 02 |
| Less repaid to city | 8,704 69 | 179,449 38 | 59,706 | 3 01 |
| 1885–86 | \$146,321 82 | 173,443 30 | 55,700 | 3 01 |
| Less repaid to city | 375 99 | 145,945 83 | 61,259 | 2 38 |
| 1886–87 | \$124,591 72 | 140,545 05 | 01,200 | 2 50 |
| Less repaid to city | 271 51 | 124,320 21 | 62,259 | 2 00 |
| 1887–88 | \$140,409 56 | 124,520 21 | 02,293 | 2 00 |
| Less repaid to city | 189 93 | 140,219 63 | 62,226 | 2 25 |
| 1888-89 | \$152,784 40 | 140,210 00 | 02,220 | 2 20 |
| Less repaid to city | 309 36 | 159 475 04 | 61 501 | 2 36 |
| 1889–90 | \$161,083 84 | 152,475 04 | 64,584 | 2 30 |
| Less repaid to city | 1,340 74 | 150 7/2 10 | 66,003 | 2 42 . |
| 1890–91 | \$155,753 11 | 159,743 10 | 00,000 | 2 42 |
| Less repaid to city | 1,119 62 | 154,633 49 | 67,022 | 2 31 |

SCHOOL DOCUMENT NO. 10 — 1891.

EXPENDITURES FOR THE PUBLIC SCHOOLS.

REPORT

of

COMMITTEE ON ACCOUNTS.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

In School Committee, Boston, May 26, 1891.

Ordered, That the Committee on Accounts be authorized to report in print, and that eight hundred copies of the report be printed.

Attest:

PHINEAS BATES,

Secretary.

TWENTY-THIRD ANNUAL REPORT.

COMMITTEE ON ACCOUNTS.

Boston, June 1, 1891.

To the School Committee: —

Your committee, in accordance with Chap. 4, Sect. 42, of the Rules, submit their report for the financial year commencing May 1, 1890, and ending April 30, 1891. The expenditures in detail, as furnished by the Auditing Clerk, are included in this report.

The Legislature of 1889 transferred the responsibility of purchasing furniture and making repairs from the Public Building Department of the City Council to the School Committee; and under date of May 27, 1890, the School Board gave authority to the Superintendent of Public Buildings to do the work and draw upon the City Auditor for the expenses incurred.

Under this vote the Superintendent of Public Buildings expended for furniture, repairs, and the alterations of school-houses, the sum of \$263,860.16, the details of which expenditure were furnished by him and are included in this report.

Under date of Feb. 11, 1890, this committee presented to the School Board the estimated amount required for the schools, exclusive of the expenses for furniture, repairs, alterations, and the building of new school-houses. The estimates submitted were approved by the School Committee and forwarded to the City Auditor.

| The City Council grapenses of the public | | | | | | |
|--|---------|-------|---|---|-------------|----|
| | | | | | \$1,712,000 | 00 |
| Supplies and incidental | s . | • | • | • | 98,400 | 00 |
| Fuel, gas, and water | • | • | | | 80,200 | |
| Salaries of janitors . | • | • | • | • | 104,500 | 00 |
| Salaries of officers . | • | • | | | 59,500 | 00 |
| Salaries of instructors | | • | • | | \$1,369,400 | 00 |
| The estimates were a | s follo | ows:- | | | | |

| penses of the public so | shoors, | ΦI | , 313,21 | <i>J</i> 0, | which amo | une |
|--------------------------|---------|------|----------|-------------|-------------|------|
| was made up as follows: | | | | | | |
| Salaries of instructors | | | | | \$1,350,000 | ()() |
| Salaries of officers . | | | • | | 59,500 | 00 |
| Salaries of janitors . | | | • | | 104,500 | 00 |
| Fuel, gas, and water | • | | | | 80,200 | 00 |
| Supplies and incidentals | • | | | | 90,000 | 00 |
| School-house repairs | | | | | 228,500 | 00 |
| Gibson School-house, he | ating a | ppa | ratus | | 3,000 | 00 |
| Prince School-house, yar | rd | | | | 500 | 00 |
| Stoughton School-house. | heatin | 0 91 | nnarati | 1S. | 3,000 | 00 |

\$1,919,200 00

Of the amount appropriated, \$235,000 were for school-house repairs, which, by vote of the School Committee, were transferred by the City Council to an appropriation "For School-houses, Public Buildings." Deducting this amount from the total appropriation granted, there remained \$1,684,200 to the credit of the School Committee to meet the expenditures of the Board, exclusive of repairs, a reduction from the estimates presented by them of \$27,800.

In addition to the amount granted, the City Auditor credited \$981.68, received from the State of Massachusetts on account of travelling expenses of pupils in the Horace Mann School, to the appropriation, making the total amount available \$1,685,181.68.

The fact that the School Committee were able to keep within the appropriation was due to a saving of more than \$15,000 in the cost for fuel, gas, and water, and supplies.

The ordinary expenses the past year were as follows:—

School Committee.

| Salaries of | inst | ructo | rs | | | | • | \$1,364,875 | 87 |
|-------------|---------|-------|--------|---------|-------|------|------|-------------|----|
| Salaries of | foffic | ers | | | | | | 60,112 | 33 |
| Salaries of | i janit | ors | | | | | | 103,420 | 72 |
| Fuel, gas, | and ' | water | • | | | | | 69,524 | 54 |
| Supplies | s and | Incid | lental | ls:— | | | | | |
| Books | | | | | \$41, | 074 | 14 | | |
| Printing | | | | • | 6, | 119 | 45 | | |
| Stationery | and | drawi | ing m | ıa- | | | | | |
| terials | | | | • | 12, | 052 | 08 | | |
| Miscellane | ous it | ems | | | 26, | 982 | 90 | | |
| | | | | | | | _ | 86,228 | 57 |
| Expended | from | the a | .ppro | priatio | on | | | \$1,684,162 | 03 |
| Expended | from | incon | ne of | Gibso | on Fu | nd | | 1,198 | 25 |
| Total expe | nditu | re | | | | • | | \$1,685,360 | 28 |
| Total incom | ne | • | • | • | • | • | • | 41,209 | 06 |
| Net expend | liture | , Sch | ool (| Commi | ittee | | | \$1,644,151 | 22 |
| | | Publi | c Bu | ilding | n Dep | urtm | ent. | | |

| Furniture, | maso | nry, | carpe | n- | | | | | |
|------------|--------|--------|--------|-----|---------|------|----|-------------|----|
| try, roo | ofing, | heat | ing-ap | o- | | | | | |
| paratus, | etc. | • | • | | \$263,8 | 60 | 16 | | |
| Income | • | • | • | • | 2 | 808 | 00 | | |
| Net exp | endit | ure, F | Public | Bui | lding D | ep't | | 263,652 | 16 |
| Total ne | | | | | • | | | \$1,907,803 | 38 |

| Your committee, | in preparing the estimates, stated | that |
|---------------------|------------------------------------|------|
| the probable income | would be as follows:— | |

| the probable meetic would be a | is follows | • — | |
|---|------------|-----|-------------------|
| Non-residents, State and City | | | \$13,000 00 |
| Trust-funds and other sources | | • | 24, 000 00 |
| Total estimated income | | • | \$37,000 00 |
| The income collected was as | follows:- | _ | |
| Non-residents, State and City, | \$16,887 | 97 | |
| Trust-funds and other sources, | 23,201 | 47 | |
| Sale of books | 137 | 94 | |
| State of Massachusetts, travelling expenses pupils Horace | | | |
| Mann School | 981 | 68 | |
| Total income | | | \$41,209 06 |

The expenses of the School Committee, as compared with the year previous, present an increase of \$29,536.31. The expenses incurred under the direction of the Superintendent of Public Buildings for furniture, repairs, etc., of schoolhouses were increased \$2,293.61, thereby increasing the total net expenditure \$31,829.92.

The average number of pupils belonging to all the schools was 67,022. The average cost per pupil incurred by the School Committee was \$24.53; by the Superintendent of Public Buildings, \$3.94, — making the total average cost per pupil, \$28.47.

The cost per pupil the past year as compared with the year previous shows an increase of five cents per pupil.

The increase in the average number of pupils attending the schools the past year was 1,019.

The number of regular instructors on the pay-rolls, April 1, 1890, was 1,311. During the year 83 resigned, 1 was discontinued, and 14 died. Of the 83 instructors who

resigned, 32 were appointed to higher positions, making the actual reduction 66, and leaving 1,245 of the original number. During the year there were, in addition, 88 new appointments, making the total of regular instructors, April 1, 1891, 1,333, divided among the several grades of schools, as follows: High Schools, 117; Grammar Schools, 683; Primary Schools, 463; Horace Mann School, 11; Kindergartens, 59, — an increase of 22 for the year.

In addition there have been 106 temporary teachers and 60 special assistants employed in the day schools, an average of 178 instructors in the Evening and Evening Drawing Schools and 52 special teachers, making a total of 1,729 instructors on the pay-rolls during the year.

Later in this report the expenses of each grade of schools are given, but include only such as are directly chargeable to the different grades. In addition, certain expenditures, which might be termed general expenses, such as cost of supervision, salaries of officers and directors of special studies, printing, the annual festival, and similar expenditures, amounting to \$101,668.05, or about six per cent. of the running expenses, are incurred for the schools as a whole.

In like manner a certain part of the income collected, amounting to \$22,003.22, is received for the schools in general, and not for any particular grade.

The following shows the total net cost for carrying on each grade of schools, by charging and crediting each with its share pro rata of the general expenses and income. It includes not only the expenses of the School Committee, but also expenditures made for furniture, repairs, etc., from the appropriation under the charge of the Superintendent of Public Buildings.

| NORMAL, LATIN, | AND | HIG | H S | CHOOLS | 3. | |
|--|--------|--------|------|---------------|---------------------------------------|--|
| Salaries of instructors | | | | | | \$212,315 13 |
| | | | | | | 11,081 00 |
| Books, drawing materials, and sta | atione | ery | | | | 10,957 93 |
| Other supplies and miscellaneous | | | | | • | 2,178 48 |
| Fuel, gas, and water | | | | | | 9,490 27 |
| Proportion of general expenses | • | • | • | | | 15,886 43 |
| Total cost School Committee | | | | | | \$261,909 24 |
| Income from sale of books . | | | | \$42 | 09 | |
| Proportion of general income | | | | 3,438 | 18 | |
| Total | | • | | | | 3,480 27 |
| Net cost School Committee | | | | | | \$258,428 97 |
| Net expenses Public Building Dep | partm | ent | | | | 25,064 90 |
| Total net cost | | | | | | \$283,493 87 |
| Average number of pupils, 3,510 | ; cost | per | pu | pil, \$80 | 77 | |
| | | | _ | | | \$283,493 87 |
| Tuition paid by 106 non-resident p | oupils | S . | | | | 7,736 75 |
| Net cost for educating 3,404 i | eside | nt pr | ıpil | s. | | \$275,757 12 |
| Average cost for each resident pu | pil, | \$81 0 |)1. | | | |
| GRAMM | AR SO | CHOO | LS. | | | |
| | | | 20. | | | \$705,436 44 |
| Salaries of instructors | • | • | • | • | • | |
| | • | | | | | " ' |
| Dooks, drawing materials, and st | ation | erv | ٠ | : | | 49,914 50 |
| Books, drawing materials, and st Other supplies and miscellaneous | | | • | • | | 49,914 50 32,144 62 |
| Other supplies and miscellaneous | item | s. | | • | | 49,914 50 |
| | item | s. | • | • | | 49,914 50 32,144 62 3,582 75 |
| Other supplies and miscellaneous Fuel, gas, and water | item | s. | • | • | | 49,914 50 32,144 62 3,582 75 32,050 26 |
| Other supplies and miscellaneous Fuel, gas, and water Proportion of general expenses Total cost School Committee | item | s. | • | | · · · · · · · · · · · · · · · · · · · | 49,914 50 32,144 62 3,582 75 32,050 26 53,151 88 |
| Other supplies and miscellaneous Fuel, gas, and water Proportion of general expenses Total cost School Committee Income from sale of books . | item | s. | • | | | 49,914 50 32,144 62 3,582 75 32,050 26 53,151 88 |
| Other supplies and miscellaneous Fuel, gas, and water Proportion of general expenses Total cost School Committee Income from sale of books . Income from non-resident tuition | item | s. | • | | 97 | 49,914 50 32,144 62 3,582 75 32,050 26 53,151 88 |
| Other supplies and miscellaneous Fuel, gas, and water Proportion of general expenses Total cost School Committee Income from sale of books . Income from non-resident tuition | item | s | • | 397 | 97 | 49,914 50 32,144 62 3,582 75 32,050 26 53,151 88 |
| Other supplies and miscellaneous Fuel, gas, and water Proportion of general expenses Total cost School Committee Income from sale of books . Income from non-resident tuition | item | S | • | 397 | 97 | 49,914 50 32,144 62 3,582 75 32,050 26 53,151 88 \$876,280 45 |
| Other supplies and miscellaneous Fuel, gas, and water Proportion of general expenses Total cost School Committee Income from sale of books . Income from non-resident tuition Proportion of general income | item | s. | • | 397 11,503 | 97 | 49,914 50 32,144 62 3,582 75 32,050 26 53,151 88 \$876,280 45 |
| Other supplies and miscellaneous Fuel, gas, and water Proportion of general expenses Total cost School Committee Income from sale of books . Income from non-resident tuition Proportion of general income Net cost School Committee | item | s. | • | 397 11,503 | 97 | 49,914 50 32,144 62 3,582 75 32,050 26 53,151 88 \$876,280 45 |

pupil, \$32 07.

| PRIMAI | RY SO | сноот | LS. | | | | |
|--|--------------------------|----------------|--------|-------|-----|--|--|
| Salaries of instructors | | | | | | \$332,652 | 82 |
| Salaries of janitors | | | | | | 38,654 | |
| Books, drawing materials, and st | | | | | | 5,548 | |
| Other supplies and miscellaneous | | | | | | 2,707 | |
| Fuel, gas, and water | | | | | | 22,616 | |
| Proportion of general expenses | | | | | | 25,969 | |
| Total cost School Committee | | | | | | \$428,150 | |
| Income from sale of books . | • | • | • | \$31 | 75 | Φ±20,100 | 00 |
| Income from non-resident tuition | _ • | • | • | 28 | | | |
| Proportion of general income | | • | • | 5,620 | | | |
| Troportion of general income | • | • | • | | | 5,680 | 69 |
| Net cost School Committee | | | | | | \$422,469 | 70 |
| Net expenses Public Building Dep | | | | | • | 83,393 | 83 |
| Total net cost | | • | | • | | \$505,863 | 53 |
| Average number of pupils, 24,0 pupil, \$21 05. | | | | | per | | |
| | MANI | N SCH | COL | 4.0 | | | |
| | | | | | | \$9.748 | 17 |
| Salaries of instructors | • | • | | | | \$9,748 680 | |
| Salaries of instructors | • | • | | | | | 00 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st | ation | · · ·ery | | | | 680 65 | 00 99 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi | : ation scell | ery aneou | ıs it | | | 680 | 00 99 74 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water | : ation scell | ery aneou | ıs it | | | 680 65 1,081 | 00 99 74 78 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses | : ation scell : | ery aneou | ıs it | | | 680 65 1,081 524 781 | 00 99 74 78 38 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee | ation scell | ery aneou | is it | ems | | 680 65 1,081 524 781 \$12,882 | 00 99 74 78 38 06 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses | ation scell | ery aneou | is it | ems | | 680 65 1,081 524 781 | 00 99 74 78 38 06 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee | ation scell | ery aneou | is it | ems | | 680 65 1,081 524 781 \$12,882 169 | 00 99 74 78 38 06 11 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee Proportion of general income | ation scell | ery aneou | | ems | | 680 65 1,081 524 781 \$12,882 | 00 99 74 78 38 06 11 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee | ation scell | ery aneou | | ems | | 680 65 1,081 524 781 \$12,882 169 \$12,712 136 | 00 99 74 78 38 06 11 95 68 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee Proportion of general income | ation scell | ery aneou | | ems | | 680 65 1,081 524 781 \$12,882 169 \$12,712 | 00 99 74 78 38 06 11 95 68 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee Proportion of general income Net expenses Public Building De | ation scell | ery aneou | is it | ems | | 680 65 1,081 524 781 \$12,882 169 \$12,712 136 | 00 99 74 78 38 06 11 95 68 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee Proportion of general income Net expenses Public Building Default and School Committee Proportion of general income | ation scell | ery aneou | es it | ems | | 680 65 1,081 524 781 \$12,882 169 \$12,712 136 | 00 99 74 78 38 06 11 95 68 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee Proportion of general income Net expenses Public Building De | ation scell | ery aneou | ins it | ems | | \$12,882 \$12,712 \$12,849 | 00 99 74 78 38 06 11 95 68 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee Proportion of general income Net expenses Public Building Definition of the State, etc., for the State, etc., for salary of janitary and salary in the State, etc., for salary of janitary of janitary in the State, etc., for salary of janitary of janitary in the State, etc., for salary of janitary of | ation scell | ery aneou | ins it | ems | ing | \$12,882 \$12,712 \$12,849 | 00 99 74 78 38 06 11 95 68 63 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee Proportion of general income Net expenses Public Building De Average number of pupils, 85; of Total cost for educating 85 pupils Received from the State, etc., for expenses of pupils | ation scell | ery aneou | is it | ems | ing | \$12,849 | 00 99 74 78 38 06 11 95 68 63 |
| Salaries of instructors Salary of janitor Books, drawing materials, and st Other supplies, car-fares, and mi Fuel, gas, and water Proportion of general expenses Total cost School Committee Proportion of general income Net expenses Public Building Definition of the State, etc., for the State, etc., for salary of janitary and salary in the State, etc., for salary of janitary of janitary in the State, etc., for salary of janitary of janitary in the State, etc., for salary of janitary of | ation scell | ery aneou | is it | ems | ing | \$12,849 \$12,849 | 00 99 74 78 38 06 11 95 68 63 27 36 |

KINDERGARTENS.

| ~ | | | | | | | | |
|--------------------------|---------|-------|--------|----|---|---|---|-------------|
| Salaries of instructors | • | • | • | • | • | • | | \$30,283 54 |
| Salaries of janitors . | | | | | | | | 732 50 |
| Books, drawing material | s, and | stati | ionery | | | | | 25 46 |
| Kindergarten supplies. | | | | | | • | | 830 40 |
| Pianos and stools | | | | | | | | 401 50 |
| Other supplies and misce | llanec | us it | ems | | | | | 641 11 |
| Fuel, gas, and water . | | | | | | | | 301 31 |
| Proportion of general ex | penses | s . | • | • | • | • | • | 2,144 84 |
| Total cost School Co | mmitt | ee | | | | | | \$35,360 66 |
| Proportion of general in | | • | | | | | | 464 19 |
| N + C 1 1 C | •,, | | | | | | | |
| Net cost School Com | | | • | | • | • | • | \$34,896 47 |
| Net expenses Public Buil | lding 1 | Depa | rtmen | t. | • | | • | 1,209 40 |
| | | | | | | | | |
| Total net cost . | • | • | • | | • | | | \$36,105 87 |
| | | | | | | | | |

Average number of pupils, 1,699; average cost per pupil, \$21.25.

EVENING HIGH AND ELEMENTARY SCHOOLS.

| Salaries of instructors | | | | | | | | \$39,583 | 50 |
|------------------------------|-----------|--------|------|---|----|------|----|--|----|
| Salaries of janitors . | • | | | | | | | 2,084 | 42 |
| Books, drawing materials, a | nd s | tation | nery | | | | • | 1,551 | 99 |
| Other supplies and miscellar | neou | s iten | ıs | | | | | 56 | 54 |
| Fuel, gas, and water | | | | | | | | 3,091 | 48 |
| Proportion of general exper | nses | | | • | • | • | • | 2,994 | 12 |
| Total cost School Comm | nitte | e | | | | | | \$49,362 | 05 |
| Income from sale of books | | | | | | \$12 | 53 | | |
| Income from non-resident to | uitio | n | | | | 50 | 54 | | |
| Proportion of general incon | ne | | | | .• | 647 | 99 | | |
| | | | | | | | _ | 711 | 06 |
| Net cost School Commi | - ttee | | | | | | | \$48,650 | 99 |
| Net expenses Public Buildin | ng D | epart | ment | | | • | | 428 | 53 |
| Total net cost . | | | | | | | | \$49,079 | 52 |
| | | | | | | | | No. of Contract of | |

Average number of pupils, 5,375; average cost per pupil, \$9.13.

EVENING DRAWING SCHOOLS.

| Salaries of instructors | | | | | | | | \$9,200 00 | 0 |
|--------------------------|-----------|-------|-------|----|---|------|----|-------------|---|
| Salaries of janitors . | | | | | | | | 273 87 | 7 |
| Drawing materials and s | tatione | ery | | | | | | 1,137 18 | 3 |
| Other supplies and misce | ellaneo | us it | ems | | | | | 13 70 | 0 |
| Fuel, gas, and water . | | | | | | • | | 826 0 | 7 |
| Proportion of general ex | xpenses | s . | • | • | • | • | • | 739 4 | 1 |
| Total cost School Co | mmitte | ee | | | | | | \$12,190 2 | 3 |
| Income from non-resider | it tuitio | on | | | • | \$44 | 66 | | |
| Proportion of general in | come | ٠ | • | • | • | 160 | 03 | 204 69 | 9 |
| Net cost School Con | nmittee | | | | | | | \$11,985 5 | ŧ |
| Net expenses Public Bui | lding 1 | Depa | rtmen | t. | • | | • | 1,799 1 | 4 |
| Total net cost . | | | | | | | | \$13,784 68 | 8 |

Average number of pupils, 628; average cost per pupil, \$21.95.

MANUAL TRAINING SCHOOLS.

| Salaries of instructors. | | | | | | | | \$5,906 27 |
|----------------------------|-------|--------|--------|----|---|---|---|------------|
| Books and stationery . | | | | | | | | 34 06 |
| Lumber and hardware | | | | | | | | 470 53 |
| Crockery, groceries, and l | kitch | en ma | ateria | ls | | | | 571 00 |
| Other supplies and miscel | lane | ons it | ems | | | | | 205 34 |
| Fuel, gas, and water . | • | | | | • | ٠ | | 154 55 |
| | | | | | | | | \$7,341 75 |
| Expenses Public Building | Dep | partm | ent | | • | • | • | 132 12 |
| Total cost | | • | | | | | | \$7,473 87 |

The pupils attending the Manual Training Schools belong to and are included in the number belonging to the other grades of schools.

During the past year a course of lectures on manual training was given to the Primary School teachers, to assist them in carrying out the prescribed course of study; and supplies, such as scissors, paper for folding and cutting, and clay for modeling were generally furnished to the Primary pupils.

In the estimates for the present year \$3,000 were included for manual-training supplies, which no doubt can be used to good advantage.

There are nine schools at present belonging to this department supported by the city, two schools for carpentry, and seven cooking schools, including one established last January in the Lyman School, East Boston.

The salaries paid for instructors amounted to \$5,906.27. In addition, the city receives much benefit from the generosity of private individuals in furnishing instruction and materials for this branch of study in the North Bennet-Street Industrial School, which during the year gave instruction in printing, cooking, wood-work, modeling, and leather-work to 981 pupils from the schools in the first, second, and third divisions, in the Appleton-Street Primary School, where manual-training instruction was also given to pupils from the South End schools, and in the Warrenton-Street Slojd School where instruction was given to nearly 160 public school teachers, and to 100 boys from the Brimmer School. The city is largely indebted for these advantages to the liberality and public spirit of Mrs. Quincy A. Shaw and Mrs. Mary Hemenway.

In September, 1888, the city assumed charge of fourteen Kindergartens, employing twenty-eight teachers, which had been supported at private expense for several years. Since then the number has gradually increased, until at the present time there are thirty-one Kindergartens and fifty-nine teachers. The Committee on Kindergartens are moving slowly in the matter of establishing new schools, with the desire of keeping within the appropriation. While it is true that each division of the city has one or more Kindergartens, it would necessitate the establishment of twice as many schools as are now in operation in order to afford the child-

ren of all our citizens an opportunity to receive this instruction.

The salaries paid instructors in this branch the past year were \$30,283.54, an increase of \$5,959.94 as compared with the previous year.

The Evening High School and its two branches occupied rooms in the Latin and English High School, the East Boston High School, and the Charlestown High School buildings. The schools opened Sept. 29, 1890, and, with the exception of two weeks' vacation about Christmas, continued their sessions until March 13, 1891. The expense for salaries of instructors increased \$791 over the amount paid the previous year, which is not more than the increased number of pupils would warrant.

Sixteen Evening Elementary Schools were opened during the year, of which number fourteen continued the full term of twenty-two weeks. The Allston Evening School closed Jan. 19, 1891, and the Agassiz Evening School closed Jan. 30, 1891, on account of the decreased attendance. The cost for salaries of instructors in the Elementary Schools was \$26,111.50 as compared with \$25,471.50 for the previous year.

Five Evening Drawing Schools, two in the city proper, and one each in Charlestown, East Boston, and Roxbury, were opened Oct. 20, 1890, and held sixty-six sessions. The instructors comprised two masters, four head assistants, and eighteen assistants. The salaries paid, including those of five curators employed for clerical work and to take charge of the instruments and supplies furnished the schools, amounted to \$9,200, as compared with \$8,875 paid in 1889-90.

Two hundred and fifty sets of drawing instruments were imported and furnished these schools during the past year, at an expense of \$500.

The following table shows the expenditures made by the School Committee, the number of pupils, and the average cost per pupil, as incurred by them since the reorganization of the Board, — a period of fifteen years:—

| Year. | Expenditures. | Income. | Net Expenditures. | No. of Pupils. | Rate per pupil. |
|---------|----------------|-------------|-------------------|-------------------|-----------------|
| 1876-77 | \$1,525,199 73 | \$21,999 03 | \$1,503,200 70 | 50,308 | \$29 88 |
| 1877-78 | 1,455,687 74 | 30,109 31 | 1,425,578 43 | 51,759 | 27 54 |
| 1878-79 | 1,405,647 60 | 32,145 54 | 1,373,502 06 | 53,262 | 25 79 |
| 1879-80 | 1,416,852 00 | 49,090 28 | 1,367,761 72 | 53,981 | 25 34 |
| 1880-81 | 1,413,763 96 | 73,871 08 | 1,339,892 88 | 54,712 | 24 49 |
| 1881-82 | 1,392,970 19 | 69,344 08 | 1,323,626 11 | 55,638 | 23 79 |
| 1882-83 | 1,413,811 66 | 73,278 56 | 1,340,533 10 | 57,554 | 23 29 |
| 1883-84 | 1,452,854 38 | 79,064 66 | 1,373,789 72 | 58,788 | 23 37 |
| 1884-85 | 1,507,394 03 | 39,048 26 | 1,468,345 77 | 59,706 | 24 59 |
| 1885-86 | 1,485,237 20 | 31,213 34 | 1,454,023 86 | 61,259 | 23 74 |
| 1886-87 | 1,485,343 29 | 33,388 28 | 1,451,955 01 | 62,259 | 23 32 |
| 1887-88 | 1,536,552 99 | 37,092 81 | 1,499,460 18 | 62,226 | 24 10 |
| 1888-89 | 1,596,949 08 | 39,585 52 | 1,557,363 56 | 64,584 | 24 11 |
| 1889-90 | 1,654,527 21 | 39,912 30 | 1,614,614 91 | 66,003 | 24 46 |
| 1890-91 | 1,685,360 28 | 41,209 06 | 1,644,151 22 | 67,022 | 24 53 |

It will be seen from the above table that the expenses of the School Committee the past year, exclusive of repairs, alterations, etc., of school-houses, were 7 cents more per pupil than for the previous year.

The expenses for furniture, repairs, etc., of school buildings have remained about the same per pupil for the past four years.

The following table shows the amount expended for items under the direction of the Public Building Department for repairs needed and furniture furnished the schools for the past fifteen years:—

| Year. | Expenditures, Pub. B'lding Com. | Income. | Net Expenditures. Pub. B'lding Com. | No. of Pupils. | Rate per pupil. |
|---------|------------------------------------|----------|--|-------------------|--------------------|
| 1876-77 | \$165,876 72 | | \$165,876 72 | 50,308 | \$3 30 |
| 1877-78 | 126,428 35 | | 126,428 35 | 51,759 | 2 45 |
| 1878-79 | 114,015 32 | | 114,015 32 | 53,262 | 2 14 |
| 1879-80 | 98,514 84 | | 98,514 84 | 53,981 | 1 82 |
| 1880-81 | 145,913 55 | \$205 00 | 145,708 55 | 54,712 | 2 66 |
| 1881-82 | 178,008 88 | 247 50 | 177,761 38 | 55,638 | 3 19 |
| 1882-83 | 189,350 83 | 231 00 | 189,119 83 | 57,554 | 3 29 |
| 1883-84 | 186,852 18 | 300 00 | 186,552 18 | 58,788 | 3 17 |
| 1884-85 | 198,059 11 | 526 50 | 197,532 61 | 59,706 | 3 31 |
| 1885-86 | 188,435 63 | 137 50 | 188,298 13 | 61,259 | 3 07 |
| 1886-87 | 171,032 71 | 295 92 | 170,733 79 | 62,259 | 2 74 |
| 1887-88 | 243,107 89 | 221 00 | 242,886 89 | 62,226 | 3 90 |
| 1888-89 | 251,736 17 | 153 00 | 251,583 17 | 64,584 | 3 90 |
| 1889-90 | 262,208 75 | 850 20 | 261,358 55 | 66,003 | 3 96 |
| 1890-91 | 263,860 16 | 208 00 | 263,652 16 | 67,022 | 3 94 |

The foregoing tables include all the running expenses of the schools, and form the basis for computing the rate per pupil.

The amount paid for salaries of instructors was \$1,364,875.87, an increase of \$32,302 as compared with the previous year.

The variation in the number of pupils and the salaries paid in different grades the past year, as compared with 1889-90, were as follows:—

| High Schools, | pupils increased, | 114 | salaries increased, | \$12,287 | 13 |
|------------------------|-------------------|-------|---------------------|----------|----|
| Grammar Schools | | *102 | " | 10,725 | |
| Primary Schools, | 6.6 | 203 | 44 | 1,005 | 43 |
| Horace Mann Sch | ool, " | *4 | 66 | 1,162 | 34 |
| Kindergartens, | 66 | 337 | 6.6 | 5,959 | 94 |
| Evening Schools, | | 409 | 4.6 | 1,431 | 00 |
| Evening Drawing | Schools, " | 69 | " | 325 | 00 |
| Manual Training | Schools, | | " | 1,186 | 01 |
| Special Teachers, | | | 6.6 | *1,780 | 00 |
| Spectacle Island, | | *7 | " | | |
| Total inc | rease in pupils, | 1,019 | in salaries, | \$32,302 | 00 |

The average salary paid during the year to each regular —

| High School instructor was . | | | | \$1,735 | 46 |
|-------------------------------|--|--|--|---------|----|
| Grammar School instructor was | | | | 998 | 49 |
| Primary School instructor was | | | | 702 | 21 |

The average salary paid each regular teacher in the High, Grammar, and Primary service during the year was \$958.15.

The cost for salaries of instructors in High Schools the past year was \$212,315.13. In 1880-81, ten years ago, the cost was \$153,830.74, showing an increase of thirty-eight per cent. The number of pupils was 3,510; as compared with 2,093 in 1880-81, an increase of sixty-eight per cent.

The cost for salaries of instructors in Grammar Schools was \$705,436.44; as compared with \$607,666.01 in 1880–81, an increase of sixteen per cent. The number of pupils was 31,675; as compared with 27,412 in 1880–81, an increase of sixteen per cent.

The cost for salaries of instructors in Primary Schools was \$332.652.82; as compared with \$290,522.21 in 1880-81, an increase of fourteen per cent. The number of pupils was 24,035; as compared with 21,902 in 1880-81, an increase of ten per cent.

The number of pupils attending the public schools as compared with ten years ago (1880-81) shows an increase of 22 per cent.

| During that time salaries of instructors increase | sed . | | 23 p | er | cent. |
|---|---------|-------|------|----|-------|
| Salaries of officers increased | | | 15 | 66 | 66 |
| Salaries of janitors increased | | | 34 | " | " |
| Fuel, gas, and water increased | | | 21 | 66 | 66 |
| While the gross expenditures for supplies and | incider | itals | | | |
| show a decrease of | | | 24 | 66 | 4.6 |

The cost per pupil for salaries paid instructors in the Normal, Latin, and High Schools the past year was as follows:—

| Normal School | | | | | | \$76 | 95 |
|---------------|--|--|--|--|--|------|----|
| Latin School | | | | | | 86 | 97 |

| Girls' Latin School . | | | | | | | \$12 | 73 |
|--------------------------|----|---|---|---|-----|---|------|----|
| English High School | | | | | | | 68 | 15 |
| Girls High School . | | | | | | | 49 | 56 |
| Roxbury High School | | | • | • | | | 41 | 75 |
| Charlestown High School | | : | | | • . | | 59 | 51 |
| Dorchester High School | | | | | | ٠ | 47 | 55 |
| Brighton High School | | | | | | | 68 | 56 |
| West Roxbury High School | ol | | | | | | 62 | 55 |
| East Boston High School | | | | | | • | 49 | 04 |
| Average cost, \$60.49. | | | | | | | | |

The following shows the cost per pupil for salaries of instructors in Grammar and Primary Schools in the several school divisions of the city: -

GRAMMAR SCHOOLS.

| | | No. of Pupils. | Salaries of Instructors. | Cost per Pupil. |
|-----------|---------|----------------|--------------------------|------------------|
| First Div | vision, | 2,454 | \$55,685 34 | \$22 69 |
| Second | + 6 | 3,152 | 69,517 62 | 22 06 |
| Third | 6.6 | 3,292 | 72,838 89 | 22 13 |
| Fourth | 4.6 | 2,481 | 57,945 18 | 23 36 |
| Fifth | 6.6 | 3,268 | 69,301 78 | 21 21 |
| Sixth | 66 | 5,316 | 115,882 70 | 21 80 |
| Seventh | 6.6 | 5,348 | 116,145 39 | 21 72 |
| Eighth | | 2,856 | 62,139 06 | 21 76 |
| Ninth | 4.6 | 2,986 | 71,317 32 | 23 88 |
| Rice Sch | ool, | 522 | 14.663 16 | 28 09 |
| Tota | ls, | 31,675 | \$705,436 44 Av | r. cost, \$22 27 |

PRIMARY SCHOOLS.

| | | No. of Pupils. | Salaries of Instructors. | . Cost per Pupil. |
|-----------|---------|----------------|--------------------------|-------------------|
| First Div | vision, | 1,578 | \$22,294 25 | \$14 13 |
| Second | 4.6 | 2,388 | 34,095 23 | 14 28 |
| Third | 6.6 | 2,885 | 37,213 69 | 12 90 |
| Fourth | 44 | 1,549 | 22,915 44 | 14 79 |
| Fifth | 44 | 2,492 | 35,255 94 | 14 15 |
| Sixth | 6.6 | 4,294 | 59,146 20 | 13 77 |
| Seventh | 6.6 | 4,321 | 60,733 68 | 14 06 |
| Eighth | 6.6 | 1,926 | 26,994 11 | 14 02 |
| Ninth | | 2,258 | 28,605 98 | 12 67 |
| Rice Sch | ool, | 344 | 5,398 30 | 15 69 |
| Tota | ls, | 24,035 | \$332,652 82 4 | lv. cost, \$13 84 |

During the year, \$50,376.07 were paid for instruction by special teachers, as follows: sewing, 29 teachers, in 237 divisions, \$16,807; music, 5 teachers, \$13,200; drawing, 1 director, \$3,000; modern languages, director, \$3,000, 2 assistants, \$3,000, 1 special teacher, \$72; physical training, director from Jan. 1, 1891, \$750; calisthenics and elocution, 2 teachers, \$1,440.80; military drill, 1 teacher and 1 armorer, \$2,800; manual training, 2 teachers of carpentry, \$1,876.67; 7 teachers Schools of Cookery, \$3,639.60, 2 special teachers, \$390; school on Spectacle Island, 1 teacher, \$400.

The number of special assistants employed during the year, under Section 105 of the Regulations, to assist teachers of the lowest Primary classes, was 53, and the salaries paid the same amounted to \$3,269. Special assistants have been authorized by the Board to serve in Kindergartens also, and the number employed was 7, the salaries paid them amounting to \$450.

The number of temporary teachers employed during the year was 106, and the amount paid them was \$12,961.11, of which \$1,753.20 were expended for services in the High Schools, \$6,659.88 in the Grammar Schools, \$4,261.98 in the Primary Schools, \$25.65 in the Kindergartens, and \$260.40 in the Schools of Cookery.

The amount paid for salaries of officers was \$60.112.33, an increase over the year previous of \$1.817.33. Additional clerical service in the offices of the Superintendent and Secretary, and the appointment of an additional truant officer, were the causes of the increase.

The amount paid for salaries of janitors the past year was \$103.420.72, an increase of \$2,021.67 over the amount paid the preceding year.

The number of persons employed at the present time to take care of the school buildings is 159, with an average salary of \$650.44. Ten years ago the average salary paid

was \$501.33; but the tendency of late has been to increase the work of janitors already in the service by giving them an additional building, where it can be done advantageously. This is shown by the fact that the number of janitors employed has been increased only five in the past ten years. At the present time, three janitors each have the care of four buildings, one janitor has three buildings, and twenty-seven janitors have each two buildings. In a few of the hired buildings the rent paid includes the services of the janitor.

In the appointment of janitors to fill vacancies where the salaries are over \$300 per annum, the committee is restricted to candidates submitted by the Civil Service Commission or to transfers of janitors already in the service. When a vacancy occurs in any one of the large buildings, it is an easy matter to secure certified candidates ready to serve; but for buildings where the salaries are between \$300 and \$500 per annum much delay is experienced before available men can be obtained.

Janitors are retained in the service as long as they perform their duties in a satisfactory manner. During the year very few complaints were received from the principals for neglect of duty, and in only two instances was it deemed necessary to request resignations.

On pages 31, 32, 33, and 34 of this report is tabulated a list of buildings where the salaries paid for janitors' services amount to \$300.00 or more per annum.

The Committee on Supplies, under the Rules, have charge of the expenditures of the Board, exclusive of the amount paid for salaries of instructors, officers, and janitors. That committee presented during the year bills for approval to the amount of \$155.753.11. The income collected on account of this expenditure was \$1,119.62, leaving \$154.633.49 as the net amount expended for items under charge

of the Committee on Supplies,—a decrease, as compared with the previous year, of \$5,109.61. These expenses came under the head of "Supplies and Incidentals," and "Fuel, Gas, and Water."

Bills were approved during the year for 11,352 tons of coal, purchased at the following prices:—

| 1 | ton | at | | | \$6.10 | 12 tons at | | \$5.85 |
|-----|------|----|--|--|--------|------------|--|--------|
| 88 | tons | " | | | 5.60 | 143 " " | | 5.33 |
| 187 | 6.6 | 66 | | | 5.35 | 10,921 " " | | 4.83 |

The average price paid was \$4.85 per ton.

In accordance with the Revised City Ordinances, the Committee on Supplies, in behalf of the School Committee, made the contract for supplying the school-houses with coal. In previous years the Superintendent of Public Buildings made the contracts.

The report of the Committee on Supplies, recently presented, gives detailed information regarding the methods and cost of supplying the schools.

The Rules of the Board require this committee to make out bills for tuition of non-resident pupils, and send them to the City Hall for collection.

The amount collected from this source the past year was as follows:—

| 106 | Normal, I | Latin, aı | nd Hig | h Seh | ool | pupils | pai | d . | | \$7,736.75 |
|------|------------|-----------|---------|--------|------|--------|-----|-----|--|------------|
| 14 | Grammar | School | pupils | paid | | | | | | 397.97 |
| 2 | Primary | 6.6 | 66 | 66 | | • | | | | 28.46 |
| 6 | Evening | " | 66 | 66 | | | | | | 50.54 |
| 2 | Evening 1 | Drawing | g Schoo | ol puj | pils | paid | o | | | 44.66 |
| a to | tal of 130 | nunila | who no | ; 4 | | | | | | \$8,258.38 |

In addition \$8,629.59 were received for tuition of pupils in the Horace Mann School, \$8,419.59 from the State of Massachusetts, and \$210 from other sources.

The total amount received, \$16.887.97, shows an increase, as compared with the previous year, of \$1,800.76.

At the opening of the schools in September and early in February, blanks are sent to the schools, requesting each principal to make a return of the names of all non-resident pupils in his school or district, accompanied by pledges agreeing to pay tuition, signed by the parent or guardian.

From these returns bills are prepared, and payment is required to be made within a stated time, otherwise the pupil is dismissed from school.

Every year claims are presented for exemption from payment of tuition. In cases where pupils come to the city through the neglect or poverty of their parents, or where they have good reasons for attending school, in the opinion of this Committee, permission is given, and the tuition remitted; but those who come here for the sole purpose of going to school are obliged to pay.

In the Horace Mann School \$100 were received for every Boston pupil and \$105 for every pupil residing outside the city limits, the State of Massachusetts paying for each pupil belonging to the State. The amount received for tuition—\$8,629.59, and for travelling expenses of pupils \$981.68, making a total of \$9,611.27—was about the expense incurred for salaries; so that, by the present arrangement, the cost for salaries is practically met by payments from the State, and the remaining expenses by the city.

The income of the Gibson Fund collected by the City Treasurer and credited to the school appropriation amounted during the year to \$1,306.67.

The fund consists of about \$19,000, mostly invested in city of Boston bonds held by the City Treasurer, and about twelve acres of land remaining unsold and held by the

Street Commissioners. The land is rented to four different parties and yields an income of about \$500 per annum.

The income each year is expended for the Dorchester schools as apportioned by the Ninth Division Committee. The principals of the schools prepare requisitions for the books and materials they desire purchased, and submit them for approval to the chairman of the Ninth Division Committee and the Superintendent of Schools. The requisitions are then presented to the Committee on Accounts and, if approved, the purchases are made in accordance and forwarded to the schools, and each school charged with the expenditures made in its behalf.

The expenses charged during the year amounted to \$1,198.-25, and were included in the expenditures of the School Committee.

In the following pages of this report will be found a list of the buildings occupied by the High, Grammar, Primary, and Special schools, and Kindergartens, their location, number of rooms in each, and the number of instructors employed. The valuation of each building is also given, as appraised by the assessors, May 1, 1890.

The total valuation of the buildings and land used for each of the different grades of schools was as follows:—

| High Schools, incl | uding | ne | w R | oxbury | High | ι. | | | \$1.437.700 00 |
|--------------------|--------|-----|------|--------|------|----|---|---|----------------|
| Grammar Schools | | | | | | | | | 4,651,300 00 |
| Primary Schools | | | | | | | | | 2,909,400 00 |
| Kindergartens | | | | | | | | | 83,700 00 |
| Special Schools | • | • | • | | • | • | • | • | 118,500 00 |
| Total valuat | ion, I | May | 1, 1 | 1890 | | | | | \$9,200,600 00 |

The original cost of the above to May 1, 1890, was about \$8,197,000.

Your committee have added to this report the estimates for the present financial year as prepared, approved, and presented to His Honor the Mayor in January last. The amount asked for was as follows:—

| Salaries for instructors | | | | | \$1,398,400 | 00 |
|--------------------------|----------|--------|---------|------|-------------|----|
| Salaries of officers . | | | | | 60,900 | 00 |
| Salaries of janitors . | • | | | | 106,600 | 00 |
| Fuel, gas, and water. | • | | | | 79,200 | 00 |
| Supplies and incidental | exper | | | | 99,500 | 00 |
| | | | | | \$1,744,600 | 00 |
| In addition, there we | ere req | ueste | l for i | fur- | | |
| niture, repairs, and a | lteratio | ons of | scho | ool- | | |
| houses, to be expended | unde | r the | direct | ion | | |
| of the Superintendent | of Pu | blie I | Buildi | ngs | | |
| for | | | | | | |
| Ordinary repairs . | | \$260 | 0,600 | 00 | | |

379,600 00

Total amount required, 1891-92 . . \$2,124,200 00

119,000 00

Extraordinary repairs

The City Council granted the School Committee for expenses of the public schools \$1,500,000, which was nearly three-fourths of the amount asked for, exclusive of the amount requested for extraordinary repairs.

The present financial year has been changed by the City Council and will end Jan. 31, 1892, instead of April 30, 1892. Hereafter the financial year will be from February 1 to January 31. It is intended, therefore, that the amount granted will meet the expenditures for the nine months from May 1, 1891, to Jan. 31, 1892. In the opinion of this Committee the amount appropriated for the support of

the schools, \$1,500,000 for nine months (equivalent to \$2,000,000 for the year), shows a liberal spirit on the part of the City Council, and it is hoped that the expenses will come within the appropriation granted.

During the year Mr. George R. Swasey, who was chairman of this committee for the larger part of the year covered by this report, retired from service on the School Board.

Mr. Swasey was a member of the School Committee four years, and the interest he manifested in the work, particularly the duties of this committee, combined with the ability, sound judgment, and legal knowledge he possessed, made him a most valuable member.

The valuable time he freely gave to the city of Boston, in his official capacity, entitled him to the gratitude of its citizens and the well-wishes of his associates.

Respectfully submitted,

LIBERTY D. PACKARD,

Chairman.

WILLARD S. ALLEN, BENJAMIN B. WHITTEMORE, J. P. C. WINSHIP, WILLIAM A. DUNN,

Committee on Accounts.

SCHOOL EXPENSES.

ANNUAL EXPENDITURES for the Public Schools of Boston for the last thirty financial years, ending 30th April in each year; also the average number of scholars. Annexations occurred as follows: Roxbury, Jan. 6, 1868; Dorchester, Jan. 3, 1870; Charlestown, Brighton, and West Roxbury, Jan. 5, 1874.

| Total Expenditures. | \$674,107 74 534,867 01 471,343 28 643,774 65 776,375 22 776,375 22 776,375 27 1,575,270 01 1,575,270 01 1,575,270 02 1,564,700 29 2,001,330 84 1,756,410 29 1,756,410 20 1,756,410 20 1,750,010 40 1,750,010 40 1,750 |
|---|--|
| Cost of new School-houses. | \$155,392 40 101,653 62 5,870 87 90,699 84 101,575 80 188,790 84 11,575 80 112,377 86 12,377 146 17,500 63 |
| Net Rate per Scholar. | 88888888888888888888888888888888888888 |
| Net Running Expenses. | \$411,970 28 426,077 8 426,077 8 426,077 8 545,237 8 6773,247 86 6773,246 08 772,731 44 972,731 44 1,054,378 67 1,054,378 67 1,054,378 67 1,054,378 67 1,054,378 67 1,056,071 43 1,01,378 49 1,629,632 89 1,629,632 89 1,642,371 98 1,642,371 98 |
| Ordinary Revenue. | \$6,885.90 6,885.90 7,185.78 7,185.78 8,571.22 6,899.83 14,661.16 26,899.83 28,848.73 29,635.72 20,635.72 20,635.72 21,999.33 30,109.33 30,109.33 30,109.33 30,53 3 |
| Total for Running Expenses. | \$418,775 34 432,933 39 453,422 41 553,104 84 555,104 84 |
| Incidental Expenses. | \$110,427,00 113,847,17 172,331,78 172,331,78 172,331,78 176,108,85 248,066,95 229,232,59 229,232,59 229,232,59 474,78,11,52 474,78,11,52 474,78,11,52 474,78,11,52 474,78,11,52 866,330,68 422,47,48 422,269 422,269 423,023 424,23 423,023 424,23 423,023 424,24 422,269 423,023 424,24 422,269 423,023 424,24 422,269 423,023 423,023 424,03 424 |
| Salaries of Teachers and Officers, School Committee. | \$308,348,28 \$19,066,22 \$38,2710,66 \$38,2710,66 \$38,2710,66 \$61,100,68 \$61,500 |
| Total No. of Scholars Belonging | 27,081 27,061 27,061 27,061 28,002 28,002 28,002 28,108 28 |
| No. of Evening Scholars Belonging | 6.0035 |
| No. of Day Scholars Belonging | 27, 081 27, 081 27, 081 27, 081 27, 081 27, 081 27, 081 27, 188 28, 521 28, 531 28, 53 |
| Financial Year. | 1861-62 1862-64 1862-64 1865-64 1865-64 1865-65 1865-65 1865-65 1876-67 1876-76 1876-76 1876-77 1877-78 1876-80 1876-80 1876-80 1876-80 1876-80 1876-80 1876-80 1876-80 1876-80 1876-80 1886-81 |

(From report of James H. Dodge, Esq., City Auditor.)

| CALENDAR FOR FINANCIAL YEAR 1891-92. | | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-----------------|----------|----------|----------|---|---------|----------|----------|----------|----------|----------|-----------|-----------|----------------------|----------|---------|----------|----------|----------|----|
| FEBRUARY. | | | | | | JUNE. | | | | | | OCTOBER. | | | | | | | | |
| Su | Mo | Tu | We | Th | Fr | Sa | Su | Mo | Tu | We | Th | Fr | Sa | Su | Mo | Tu | We | Th | Fr | Sa |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | • • | 1 | 2 | 3 | 4 | 5 | 6 | | •• | | | 1 | 2 | 3 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 7 | 8 | 9 | 10 17 | 11 | 12 | 13 | 11 | ā | 6 | 7 | 8 | 9 | 10 |
| 15 | 16 23 | 17 24 | 18 25 | 19 26 | $\begin{array}{c c} 20 \\ 27 \end{array}$ | 21 28 | 14 21 | 15 22 | 16 23 | 24 | 18 25 | 19 26 | 27 | 18 | 12 19 | 13 20 | 14 21 | 15 22 | 16 23 | 24 |
| | | 24 | 20 | 20 | 21 | | 28 | 29 | 30 | | | | | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| 1 | | | | | | | | | | | | | | | | | ••• | •• | •• | |
| | MARCH. | | | | | | JULY. | | | | | NOVEMBER. | | | | | | | | |
| Su | Mo | Tu | We | Th | Fr | Sa | su | Mo | Tu | We | Th | Fr | Sa | Su | Mo | Tu | We | Th | Fr | Sa |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 31 | 25 | 26 | 27 | 28 | 19 26 | 20 27 | 21 28 | 22 29 | 23 30 | 24 31 | 25 | 22 29 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 50 | 91 | :: | | | | 20 | | 20 | 49 | | | | 25 | 30 | | | | | |
| | APRIL. | | | | | AUGUST. | | | | | | | DECEMBER. | | | | | | | |
| Sn | Mo | Tu | We | Th | Fr | Sa | Su | Mo | Tu | We | Th | Fr | Sa | Su Mo Tu We Th Fr Sa | | | | Sa | | |
| | | | 1 | 2 | 3 | 4 | | | | | | | 1 | | | 1 | 2 | 3 | 4 | 5 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 19 | 1 | 21 | 22 | 23 | 24 | 25 | 16 | 17 | 18 | 19 26 | 20 27 | 21 28 | 22 | 20 27 | 21 28 | 22 29 | 23 | 24 31 | 25 | 26 |
| 26 | | 28 | 29 | 30 | ••• | | 23 30 | 24 31 | 25 | 20 | 21 | 20 | 29 | 2. | | | | 31 | •• | |
| | MAY. SEPTEMBER. | | | | | | | | JANUARY. | | | | | | | | | | | |
| Sn | Mo | Tu | We | Th | Fr | Sa | Su | Mo | Tu | We | Th | Fr | Sa | Su | Mo | Tu | We | Th | Fr | Sa |
| | | | | - | 1 | 2 | - | | 1 | 2 | 3 | 4 | 5 | | | - | | - | 1 | 2 |
| 3 | 1 | 5 | 6 | 7 | 8 | 9 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 13 | 14 | 15 | 16 | 17 | 1.8 | 19 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | | 26 | 27 | 28 | 29 | 30 | 27 | 28 | 29 | 30 | | | • • | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | ٠. | ١ | | U | | | | 1 | | • • | 31 | | ١ | | ١ | | |

Figures in black indicate days on which schools are in session; in red, days on which they are closed.

Besides these, Thanksgiving and the Friday following, and Fast Day, are holidays.

The regular meetings of the School Committee are on the evenings of the second and fourth Tuesdays in each month, except July and August.

PAY-DAYS FOR THE TEACHERS OF THE PUBLIC SCHOOLS BY THE CITY TREASURER.

Payments are made at the school-houses on the following working days of the schools each month, according to the time the rolls are received by the Treasurer:—

Last or first Monday: Bowdoin, Phillips, and Wells.

Last or first Tuesday: Dorchester High, Eliot, Hancock, Harris, Minot, and Stoughton.

Last or first Wednesday: East Boston High, Adams, Chapman, Emerson, and Lyman.

Last or first Thursday: Normal, Latin, Charlestown High, English High, Brimmer, Bunker Hill, Edward Everett, Frothingham, Gibson, Harvard, Henry L. Pierce, Hugh O'Brien, Mather, Prescott, Prince, Rice, Tileston, Warren, Winthrop, and Horace Mann.

Last or first Friday: Girls' Latin, Girls' High, Bigelow, Dwight, Everett, Franklin, Gaston, John A. Andrew, Lawrence, Lincoln, Norcross, Quiney, Shurtleff, and Thomas N. Hart.

First Monday after the 27th: Roxbury High, Dearborn, Dillaway, Dudley, Hyde, and Sherwin.

First Tuesday after the 27th: Charles Sumner, Mt. Vernon.

First Wednesday after the 27th: Brighton High, Allston, Bennett.

First Thursday after the 27th: Comins, Lowell, and Martin.

First Friday after the 27th: West Roxbury High, Agassiz, Bowditch, George Putnam, and Lewis.

The schools in East Boston, Charlestown, North and West Ends are paid by Mr. Gibson; the remainder of the schools in the city proper by Mr. Carty; those in Roxbury, West Roxbury, and Brighton by Mr. Gibbons; and those in South Boston and Dorchester by Mr. Vaughn.

Janitors are paid on the same days as the teachers.

If for any reason the schools should be closed on the above-named days, the teachers will be paid as soon after as possible.

Teachers not paid on the regular days will be paid at the Treasurer's office, between 9 A.M. and 2 P.M., any day after the paymaster has visited the school.

Teachers should collect their salaries in person, except in cases of sickness, when orders addressed to the City Treasurer will be received.

Kindergarten, Evening School teachers, and Special Instructors will be paid on the last secular day but one of each month, between 9 A.M. and 2 P.M., at the City Treasurer's office, City Hall.

| SALARIES OF | OFFI | CERS | AND | TE | ACH | ERS | OF | | |
|--|-----------|---------|----------|---------|------|---------|----|--|--|
| THE PU | BLIC | SCHO | OOLS, | 189 | 1-92 | | | | |
| Superintendent | | | | | | \$4,200 | 00 | | |
| Supervisors (each) | | | | | | 3,780 | 00 | | |
| Secretary . | | | | | | | | | |
| Auditing Clerk | | | • | • | • | 2,880 | 00 | | |
| Normal School. | | | | | | | | | |
| Head-Master . | | | | | | \$3.780 | 00 | | |
| Sub-Master, first ye | | | | | | φυ,100 | UU | | |
| | | | | | | 2,496 | 00 | | |
| \$60; maximum First Assistant, firs | t vear | \$1,1 | 40; anı | nual | in- | -,200 | | | |
| crease, \$36; max | | | | | | | | | |
| Second Assistants, | first y | ear, \$ | 31,140; | ann | ual | | | | |
| increase, 48; max | | | | | | 1,380 | 00 | | |
| | | | | | | | | | |
| | FIRS | T GRA | DE. | | | | | | |
| | Hig | h Scho | ols. | | | | | | |
| Head-Masters . | | | | | | \$3,780 | 00 | | |
| Masters | | | | | | | | | |
| Junior-Masters, firs | t year | , \$1,0 | 08; an | nual | in- | | | | |
| crease, \$144; max | ximum | (with | rank of | mast | er,) | 2,880 | 00 | | |
| | | | | | | | | | |
| | SECO | ND GR | ADE. | | | | | | |
| | Grami | nar Se | chools. | | | | | | |
| Masters, first year, \$ | 2,580; | annua | l increa | se, \$(| 30; | | | | |
| maximum . | | | | | . : | \$2,880 | 00 | | |
| Sub-Masters, first ye | ear, \$1, | 500; a | nnual i | ncrea | se, | | | | |
| \$60; maximum | | • | | • | | 2,280 | 00 | | |

THIRD GRADE.

High Schools.

| 11tyte Soloste. | | |
|---|---------|------|
| Assistant Principal | \$1,800 | 00 |
| ¹ First Assistants | 1,620 | 00 |
| Assistants, first year, \$756; annual increase, | | |
| \$48; maximum | | 00 |
| | | |
| FOURTH GRADE. | | |
| Grammar and Primary Schools. | | |
| First Assistants, first year, \$900; annual in- | | |
| crease, \$36; maximum | \$1,080 | 00 |
| Second Assistants, first year, \$756; annual in- | | |
| crease, \$12; maximum | 816 | 00. |
| Third Assistants, first year, \$456; annual in- | | |
| crease, \$48; maximum | 744 | 00. |
| Fourth Assistants, first year, \$456; annual in- | | |
| crease, \$48; maximum | 744 | 00 |
| | | |
| SPECIAL GRADE. | | |
| Kindergartens — Principals, first year, \$600; | | |
| annual increase, \$36; maximum | \$708 | ()() |
| Kindergartens — Assistants, first year, \$432; | | |
| annual increase, \$36; maximum | 540 | 00 |
| Special Instructors of Music (each) | 2,640 | 00 |
| Director of Drawing | 3,000 | 00 |
| Teacher of Chemistry, Girls' High School . | 1,620 | 00 |
| Assistant in Chemistry, Girls' High School . | 804 | |
| Teacher of Physical Culture, Girls' High School, | 1,008 | |
| Teacher of Physical Culture, Girls' Latin School, | 492 | |
| Teacher of Drawing, etc., Normal School | 1.080 | |
| Teacher of Kindergarten Methods, Normal School | | |
| Director of French and German | 3,000 | 00 |

¹ It has been voted to abolish this grade when the two present incumbents retire from service.

| Assistants in French and German (each) | \$1,500 | 00 | | | | | | | |
|---|---------|----|--|--|--|--|--|--|--|
| Special assistant in German, Brighton High | | | | | | | | | |
| School, per week of actual service of three | | | | | | | | | |
| hours | 4 | 00 | | | | | | | |
| Director of Physical Training | 3,000 | 00 | | | | | | | |
| Assistant Instructor of Physical Training | 1,680 | 00 | | | | | | | |
| Principal, Horace Mann School for the Deaf . | 2,508 | 00 | | | | | | | |
| First Assistant, " " | 900 | 00 | | | | | | | |
| Assistants, first year, \$700; second year and | | | | | | | | | |
| subsequently | 800 | 00 | | | | | | | |
| Instructors in Manual Training Schools (each) . | 1,200 | 00 | | | | | | | |
| Instructors in Schools of Cookery, first year, | | | | | | | | | |
| \$456; annual increase, \$48; maximum | 744 | 00 | | | | | | | |
| Instructor Military Drill | 2,000 | 00 | | | | | | | |
| Armorer | 800 | 00 | | | | | | | |
| Instructor in School on Spectacle Island (includ- | | | | | | | | | |
| ing all expenses for school, except for books). | 400 | 00 | | | | | | | |
| Sewing, one division | 108 | 00 | | | | | | | |
| "two divisions | 192 | 00 | | | | | | | |
| " three " | 276 | 00 | | | | | | | |
| " four " | 348 | 00 | | | | | | | |
| " five " | 420 | 00 | | | | | | | |
| " six " | 492 | 00 | | | | | | | |
| " seven " | 540 | 00 | | | | | | | |
| " eight " | 588 | 00 | | | | | | | |
| " nine " | 636 | 00 | | | | | | | |
| " ten " | 684 | 00 | | | | | | | |
| " eleven " | 732 | 00 | | | | | | | |
| " all over eleven divisions | 744 | 00 | | | | | | | |
| Principal, Evening High School (per week), first | | | | | | | | | |
| year, \$30; second year, \$40; third year and | | | | | | | | | |
| subsequently | 50 | 00 | | | | | | | |
| Assistants, Evening High School (per evening), | 4 | 00 | | | | | | | |
| Principals, Evening Elementary Schools (per | | | | | | | | | |
| evening), 100 pupils or more | 5 | 00 | | | | | | | |

| Principals, Evening Elementary Schools (per | |
|--|--------|
| evening), less than 100 pupils | \$4 00 |
| First Assistants, Evening Schools (per evening), | 2 50 |
| Assistants, Evening Schools (per evening) . | 1 50 |
| Special Assistant Teachers, Primary Schools and | |
| Kindergartens (per week) | 5 00 |

Masters elected as Principals of High Schools, whose average whole number for the preceding school year exceeds one hundred pupils, receive \$288; Sub-Masters, elected as Principals, \$216, — each, in addition to the regular salary of the rank.

Temporary Junior-Masters receive \$5 per day of actual service.

Other temporary teachers receive one-quarter of one per cent. of the maximum salary of the grade per day of actual service.

The salaries for the different grades of instructors in the Evening Drawing Schools have not yet been fixed by the Board (June 1, 1891).

SALARIES OF JANITORS.

April 1, 1891.

HIGH SCHOOLS.

The salaries paid janitors per annum for taking care of the various High School buildings are as follows:—

Latin and English High School: -

| Engineer | | | | | \$2,100 | 00 | |
|----------------------|--------|--------|--|--|---------|----|---------------------|
| Janitor of Latin So | | | | | 1,200 | 00 | |
| Janitor of English I | High S | School | | | 1,800 | 00 | |
| | | | | | | | \$5,100 00 |
| Girls' High So | hool | :— | | | | | |
| Janitor | | | | | \$1,620 | 00 | |
| Assistant janitor, | | | | | 720 | 00 | |
| | | | | | | | 2,340 00 |
| Dorchester High | Scho | ol | | | - | | ¹ 780 00 |
| Charlestown " | " | • | | | • | | 768 00 |
| Carried forwar | d | | | | | | \$8,988 00 |

| Brought for | ward | , | | | | | | | | \$8,988 00 | | |
|-------------------|--------|------|------|-----|------|---|---|---|---|-------------|--|--|
| Roxbury High S | School | l . | | | | | | | | 576 00 | | |
| East Boston | 6.6 | | | | | | | | | 552 00 | | |
| Brighton | 66 | | | | | | | | | 444 00 | | |
| West Roxbury | 66 | | • | • | | • | • | • | | 432 00 | | |
| Total for | High | Scho | ools | • | • | | | | | \$10,992 00 | | |
| KINDERGARTENS. | | | | | | | | | | | | |
| Walpole Street | (per a | nnuı | n) | | | | | | | \$240 00 | | |
| Hudson Street | | 6 | | | | | | | | 144 00 | | |
| North Margin St | reet ' | 6 | | | | | | | | 144 00 | | |
| Prince | • | 6 | | | | | | | | 120 00 | | |
| Field's Corner | 6 | 6 | | • | | | | | ٠ | 72 00 | | |
| Total. | | | | | • | | | | | \$720 00 | | |
| Rooms of t | he S | choo | l Co | mmi | ttee | : | | | | | | |
| Janitor . | | | | | | | | | | \$1,400 00 | | |
| Assistant janitor | • | | • | | • | • | | • | | 696 00 | | |
| Total. | | | • | | | | | | | \$2,096 00 | | |
| | | | | | | | | | | | | |

SPECIAL SCHOOLS.

The salaries paid janitors for taking care of the rooms occupied for Evening Schools are based upon the number of rooms occupied, \$12 per month being allowed for the first room and, as a rule, \$2 for each additional room while the schools are in session. The janitor of the Evening High School receives \$50 per month, and \$100 additional for the term for the services of a door-keeper.

The salaries paid the past year for the Special Schools were as follows:—

| Horace Mann School (old and n | ew | buildings) | | \$680 00 |
|-------------------------------|----|------------|--|------------|
| Evening Schools | | | | 2,084 42 |
| Evening Drawing Schools . | | | | 273 87 |
| | | | | |
| Total for Special Schools | | | | \$3,038 29 |

GRAMMAR SCHOOLS.

The salaries paid janitors per annum for taking care of the various Grammar School buildings are as follows:—

| Hugh O'B | rien | | | | \$1.404 | Lincoln | | | | | \$876 |
|------------|--------|------|----|---|---------|------------|-------|-------|------|---|-------|
| Bennett an | nd Br | anch | | ٠ | 1,200 | Comins | | | | | 864 |
| Martin | | | | | 1,200 | Bunker H | ill | | | | 852 |
| Rice . | | | | | 1,200 | Phillips | | | | | 852 |
| Hyde | | | | | 1,140 | Bigelow | | | | | 828 |
| John A. A | ndre | w | | | 1,140 | Franklin | | | | ٠ | 828 |
| Emerson | | | | | 1,116 | Brimmer | | | | | 816 |
| Sherwin | | | | | 1,116 | Eliot. | | | | | 792 |
| Lowell | | | | | 1,104 | Ware (Bra | anch | of El | iot) | | 324 |
| Dudley | | | | | 1,080 | George Pu | ıtmar | 1 | | ٠ | 792 |
| Gaston | | | | | 1,080 | Quincy | | | | | 792 |
| Thomas N | I. Hai | rt | | | 1,080 | Allston | | | | | 756 |
| Shurtleff | | | | | 1,068 | Charles Su | ımne | ı. | | | 756 |
| Lyman | | | | | 1,044 | Edward E | vere | tt | | | 756 |
| Harvard | | | | | 1,020 | Wells | | | | | 744 |
| Frothingh | am | | ٠. | | 1,008 | Winthrop | | | | | 732 |
| Lawrence | | | | | 984 | Mather | | | | | 708 |
| Dearborn | | | | | 960 | Prescott | | | | | 708 |
| Prince | | | | | 960 | Minot | | | | | 696 |
| Dillaway | | | | | 924 | Harris | | | | | 672 |
| Chapman | | | | | 912 | Gibson | | | | | 600 |
| Adams | | | | | 900 | Bowdoin | | | | | 576 |
| Warren | | | | | 900 | Bowditch | and I | Branc | h | | 564 |
| Hancock | | | | | 888 | Henry L. | Pierc | е | | | 492 |
| Norcross | | | | | 888 | Tileston | | | | | 480 |
| Dwight | | | | | 876 | Stoughton | | | | | 432 |
| Everett | | | | | 876 | Agassiz | | | | | 396 |
| Lewis | | | | | 876 | Mount Ve | rnon | | | | 348 |
| | | | | | , | | | | | | |

Total for Grammar Schools.

PRIMARY SCHOOLS.

The salaries, amounting to three hundred dollars and over per annum, paid janitors for taking care of the various Primary School buildings, are as follows:—

| Winchell. | | | | \$864 | Sharp | | | \$444 |
|-----------------|-------|-----|---------|--------|---------------------|------|-----|----------|
| Cushman. | | | | 840 | Bunker Hill-st. | | | 432 |
| Yeoman-st. | | | | 744 | Drake | | | 420 |
| Appleton-st. | | | • | 720 | Old Dorchester Hi | gh | | 420 |
| Joshua Bates | | | • | 720 | Webster-pl | | | 420 |
| Lucretia Crock | ker | | | 720 | Winship-pl | | | 420 |
| Cyrus Alger | | | | 672 | Bailey-st | | | 408 |
| Howe . | | | | 672 | George-st | | | 403 |
| Quincy-st. (R | ox.) | | | 648 | North Harvard-st. | | | 384 |
| Starr King | | | | 636 | Walnut-st. (Dor.) | | | 384 |
| Roxbury-st. | | | | 624 | Old Mather . | | | 372 |
| Weston-st. | | | | 624 | Pormort | | | 360 |
| Benjamin Pop | е | | | 600 | Skinner | | | 360 |
| Mather (S.B.) |) . | | | 600 | Baldwin | | | 348 |
| Ticknor . | | | | 600 | Cook | | | 348 |
| Noble . | | | | 564 | Bartlett-st | | | 336 |
| Hawes and Si | mond | ls | | 552 | Parkman | | | 336 |
| Phillips-st. (I | Rox.) | | | 552 | Poplar-st | | | 336 |
| Clinch . | | | | 540 | Austin | | | 324 |
| Concord-st. | | | | 540 | Common-st | | | 324 |
| Howard-av. | | | | 540 | Freeman | | | 324 |
| Polk-st | | | | 540 | Sumner-st. (Dor.) | | | 324 |
| Tappan . | | | | 540 | Tuckerman . | | | 324 |
| East-st | | | | 504 | Webb | | | 324 |
| Capen . | | | | 480 | Webster-st | | | 324 |
| Rutland-st. | | | | 480 | Tyler-st | | | 312 |
| School-st. (D | or.) | | | 480 | Dorchester-av. | | | 300 |
| Harvard Hill | | | | 468 | | | | |
| Wait . | | | | 456 | | | | \$27,336 |
| | | | | | | | | |
| | | | | * | care of fifty-eight | | | |
| houses, each | at a | sal | lary of | less t | han three hundred | doll | ars | |

per annum, amounts to

Total for Primary Schools . . .

11,208

\$38,544

APPROPRIATIONS AND EXPENDITURES

FOR

PUBLIC SCHOOLS.

APPROPRIATIONS AND CREDITS.

| Salaries of instructors . | \$1,350,000 | 00 |
|---------------------------|-------------|-----------------------|
| Salaries of officers . | . 59,500 | 00 |
| Salaries of janitors . | . 104,500 | 00 |
| Fuel, gas, and water . | | |
| Supplies and incidental | | |
| penses | | 68 |
| • | | \$1,685,181 68 |
| | | |

EXPENDITURES.

| 1890. Requisitions | in ac- |
|---------------------|-------------------------|
| cordance with the | same, |
| for May. | |
| Instructors . \$108 | ,176 93 |
| Officers 4 | ,970 00 |
| Janitors 8 | ,342 67 |
| Fuel, gas, and | |
| water 3 | ,047 40 |
| Incidentals . 2 | ,242 43 |
| | ——— \$126,779 43 |
| Requisitions for Ju | ene. |
| Instructors . \$109 | ,302 62 |
| Officers 4 | ,958 33 |
| Janitors 8 | |
| Fuel, gas, and | • |
| water 1 | ,152 78 |
| Incidentals . 9 | ,236 88 |
| | 100 010 00 |

133,016 28

Carried forward,

\$259,795 71 \$1,685,181 68

| Brough | ht f | oru | vard, | | \$259,795 | 71 | \$1,685,181 | 63 |
|--|------|-----|---------|------------|-----------|-----|-------------|----|
| $Requisition % \left\{ $ | | | | | , | | - , , | |
| Instructors | | | | 95 | | | | |
| Officers . | | | | | | | | |
| Janitors . | | | | | | | | |
| Fuel, gas, | | | , | | | | | |
| water . | | | 339 | 95 | | | | |
| Incidentals | | | 7,084 | 71 | | | | |
| | | - | | | 242,332 | 94 | | |
| $Requisition % \left\{ $ | ns | for | Augus | <i>t</i> . | | | | |
| Janitors . | | | \$8,408 | 67 | | | | |
| Fuel, gas, | an | d | | | | | | |
| water . | | | 17,622 | 83 | | | | |
| Incidentals | | | 7,747 | 77 | | | | |
| | | - | | | 33,779 | 27 | | |
| Requisition | | | | | | | | |
| Instructors | | | 107,941 | 37 | | | | |
| Officers . | | | 5,013 | | | | | |
| Janitors . | • | • | 8,355 | 67 | | | | |
| Fuel, gas, | an | d | | | | | | |
| water . | • | • | 25,830 | 28 | | | | |
| Incidentals | • | • | 24,335 | 11 | | | | |
| | | - | | | 171,475 | 76 | | |
| Requisitio | _ | | | | | | | |
| Instructors | | | | | | | | |
| Officers . | | | | | | | | |
| Janitors . | | | 8,460 | 08 | • | | | |
| Fuel, gas, | | | | | | | | |
| water . | • | • | 4,949 | | | | | |
| Incidentals | • | • | 8,058 | 71 | 100 100 | 2.2 | | |
| 70 4 4 4 | | _ | 3.7 | | 133,199 | 82 | | |
| Requisitio | _ | | | | | | | |
| Instructors | | | | | | | | |
| Officers . | • | • | 5,003 | 33 | | | | |
| Car'd forwar | rd, | \$1 | 21,390 | 36 | \$840,583 | 50 | \$1,685,181 | 68 |

| D 11 C | 7 | A101 200 | 9.0 | #64U #65 | 50 | å1 60% 101 60 |
|-------------|-------|-------------|-----------|------------|------|----------------|
| | | | | \$040,000 | 30 | \$1,685,181 68 |
| Janitors . | | | 11 | | | |
| Fuel, gas, | | | 70 | | | |
| water . | | | | | | |
| Incidentals | | 5,273 | 88 | 136,998 | 72 | |
| Requisition | ns fo | or Decembe | 2r. | 100,000 | 10 | |
| Instructors | | | | | | |
| Officers . | | 5,053 | 33 | | | |
| Janitors . | | | 97 | | | |
| Fuel, gas, | | | | | | |
| water . | | | 08 | | | |
| Incidentals | | | 07 | | | |
| | | | | 140,551 | 24 | |
| 1891. Req | uisi | tions for J | an- | | | |
| uary. | | | | | | |
| Instructors | | \$120,832 | 71 | | | |
| Officers . | | 4,970 | 00 | | | |
| Janitors . | | 8,898 | 10 | | | |
| Fuel, gas, | and | | | | | |
| water . | | . 1,177 | 83 | | | |
| Incidentals | | . 3,125 | 64 | | | |
| 70 | | | | 139,004 | 28 | |
| Requisitio | | | _ | | | |
| Instructors | | | | | | |
| Officers . | | | | | | |
| Janitors . | | . 8,979 | 54 | | | |
| Fuel, gas, | | | | | | |
| water . | | | | | | |
| Incidentals | • | 4,578 | 58 | 140.000 | 0.0 | |
| Requisitio | ns f | or March. | | 140,298 | 53 | |
| Instructors | | | 06 | | | |
| Officers . | | . 5,070 | | | | |
| Janitors . | | | | | | |
| | | | | | | |
| Car'd forwa | rd, | \$135,680 | 98 | \$1,397,43 | 6 08 | \$1,685,181 68 |

| Bro't forward, Fuel, gas, an water Incidentals . | d | 5,680 4,623 5,928 | 18 | 1,397 146, | | | \$1,685,181 | 68 |
|--|--------------|-------------------------|--------|---------------|------|--------------|-------------------|----|
| Requisitions. | for A | nril. | | 110, | 202 | | | |
| Instructors . | | 8,558 | 57 | | | | | |
| Officers | | 5,070 | | | | | | |
| Janitors | | 8,670 | | | | | | |
| Fuel, gas, an | d | | | | | | | |
| water | | 3,232 | | | | | | |
| Incidentals . | • ' | 4,962 | 66 | 1.40 | 402 | CC | | |
| Balance unexpe | ndad ndad | rotur | nad | 140, | 493 | 00 | | |
| to the City T | reasu | rer . | nea | | | | 1,019 | 65 |
| to the city 1 | reasa | • | ·_ | | | | | |
| | | | \$ | 1,684 | ,162 | 03 | \$1,684,162 | 03 |
| | | | - | | | | | |
| EXPENDITUI | RES | BY ' | THE | SCI | OOF | \mathbf{L} | COMMITTE | Œ. |
| | SA | LARIE | S OF | OFFI | CERS | š. | | |
| Superintendent | | • | | • | • | | \$4,200 | 00 |
| Superintendent | | rk | | | | | 720 | |
| Supervisors (si | | • | | | | į | 22,680 | |
| Secretary | | | • | • | Ů | į | 2,880 | |
| Secretary's assi | stants | · (two | ,) | • | · | · | 1,708 | |
| Auditing Clerk | | (0110 | ′) | • | • | • | 2,880 | |
| Auditing Clerk | | etant | • | • | • | • | 1,320 | |
| Assistant in off | | | | · Soord | • | • | 600 | |
| Copyist . | ices o | | 001 10 | ooaru | • | • | 1,000 | |
| • • | • | • | • | • | • | • | 900 | |
| Messenger | • | • | • | • | • | • | $\frac{300}{420}$ | |
| •• | • | • | • | • | • | • | | |
| | • | • | • | • | • | • | 360 | |
| " | • | • | • | • | • | • | 200 | |
| | • | • | • | • | • | • | . 144 | |
| Truant-officer, | | | • | • | • | • | 1,800 | |
| Truant-officers | (sixte | een) | • | • | • | • | 18,300 | 00 |
| Total for o | officer | 3 | | | | | \$60,112 | 33 |

SALARIES OF INSTRUCTORS.

| High Scho | pols. | | | | | | | |
|--------------|--------|--------|-------|---|-----------|------------|-----------|----|
| Normal | • | | | | \$14,466 | 27 | | |
| Latin . | • | | | • | 39,221 | 85 | | |
| Girls' Latin | | | | | 10,757 | 84 | | |
| English High | 1 | | • | | 54,448 | 82 | | |
| Girls' High | • | • | | | 35,681 | 96 | | |
| Roxbury Hig | gh | | | | 16,657 | 87 | | |
| Charlestown | High | l | • | | 10,116 | 95 | | |
| Dorchester H | High | | • | | 11,144 | 94 | | |
| East Boston | High | | | | 7,748 | 10 | | |
| West Roxbu | ry Hi | igh | | | 6,379 | 88 | | |
| Brighton Hig | gh | • | • | • | 5,690 | 65 | | |
| Total fo | r Hig | gh Scl | nools | | | • | \$212,315 | 13 |
| Grammar | Sch | ools. | | | | | | |
| Adams | • | | | | \$12,159 | 49 | | |
| Agassiz | • | | | | 9,480 | 06 | | |
| Allston | | | | | 13,641 | 34 | | |
| Bennett | • | | • | | 10,742 | 59 | | |
| Bigelow | | • | • | • | 15,798 | 77 | | |
| Bowditch | • | | | | 8,731 | 20 | | |
| Bowdoin | | • | • | | 10,257 | 90 | | |
| Brimmer | | | | | 16,202 | 93 | | |
| Bunker Hill | | | | | 15,971 | 73 | | |
| Chapman | • | • | | • | 14,401 | 4 0 | | |
| Charles Sum | ner | • | • | • | 12,592 | 37 | | |
| Comins | | • | • | • | 12,863 | 87 | | |
| Dearborn | | • | • | | 14,670 | 93 | | |
| Dillaway | • | • | | | 12,488 | 37 | | |
| Dudley | • | • | • | • | 15,252 | 5 6 | | |
| Dwight | • | • | • | • | 14,886 | 96 | | |
| Edward Eve | erett | • | • | • | 13,012 | 12 | | |
| Carrie | l foru | vard, | | | \$223,154 | 59 | \$212,315 | 13 |

| Brough | ht for | ward. | | | \$223,154 | 59 | \$212,315 | 13 |
|-------------|--------|-------|----|----|-----------|------------|-----------|----|
| Eliot . | | • | | | 21,150 | | , | |
| Emerson | | | • | | 14,682 | | | |
| Everett | | | | | 14,456 | 33 | | |
| Franklin | | | | | 13,754 | | | |
| Frothinghai | n | | | | 13,306 | 20 | | |
| Gaston | | | | | 13,509 | 93 | | |
| George Put | nam | | • | | 7,668 | 59 | | |
| Gibson | • | | | | 9,280 | 16 | | |
| Hancock | | | | ٠. | 12,774 | 68 | | |
| Harris. | | • | • | | 7,916 | 88 | | |
| Harvard | | | | | 14,339 | 99 | | |
| Henry L. P | ierce | | • | | 6,332 | 55 | | |
| Hugh O'Bri | en | | | | 13,915 | 74 | | |
| Hyde . | | | | | 13,287 | 24 | | |
| John A. An | drew | | | | 15,285 | 65 | | |
| Lawrence | | | | | 19,636 | 06 | | |
| Lewis. | | | | | 13,371 | 29 | | |
| Lincoln | | | | | 11,652 | 11 | | |
| Lowell | | | • | | 14,329 | 77 | | |
| Lyman | | | | | 14,442 | 4 0 | | |
| Martin | | | | | 11,584 | 27 | | |
| Mather | • | • | | | 11,953 | 22 | | |
| Minot . | | | | • | 8,125 | 53 | | |
| Mt. Vernon | | | | | 6,951 | 50 | | |
| Norcross | | | | | 14,948 | 67 | | |
| Phillips | | | | | 16,389 | 94 | | |
| Prescott | | | • | | 11,305 | 97 | | |
| Prince | • | | -• | | 11,355 | 24 | | |
| Quincy | | • | • | | 12,880 | 03 | | |
| Rice . | | • | • | | , | 16 | | |
| Sherwin | | | | | 12,916 | 28 | | |
| Shurtleff | • | | | | 14,403 | 47 | | |
| Stoughton | | | | | 11,557 | 53 | | |
| | | | | _ | | | | |

\$647,282 16 \$212,315 13.

Carried forward,

| Rrow | $ght\ for$ | mard | , | | \$647,285 | 9 16 | \$212,313 | 5 12 |
|-------------|------------|--------|------------|-----|-----------|------|-----------|------|
| Thomas N | | wara | ' , | | 10,648 | | \$212,01e |) 10 |
| Tileston | · Hait | • | • | • | 3,139 | | | |
| Warren | • | • | • | • | | | | |
| Wells . | •• | • | • | • | 12,266 | | | |
| Winthrop | | • | • | • | 17,500 | | | |
| wintinop | • | • | • | • | | | | |
| Total | for Gra | amma | ar Sch | 100 | ls, | | 705,436 | 3 44 |
| Primary | , Schoo | ols by | Dist | ric | ts. | | | |
| Adams Dis | trict | | | • | \$4,680 | 14 | | • |
| Agassiz | 66 | | | | 2,461 | 02 | | |
| Allston | 66 | | | | 7,054 | 40 | | |
| Bennett | | | | | 4,930 | 73 | | |
| Bigelow | ٠. | | | | 9,099 | 83 | | |
| ~ | ٠. | | | | 3,699 | 07 | | |
| Bowdoin | 6 6 | | | | 5,272 | 26 | | |
| Brimmer | | | | | 6,309 | 06 | | |
| Bunker Hil | l Distr | iet | | | 8,562 | 73 | | |
| Chapman | 66 | | | | 4,437 | 20 | | |
| Charles Sur | nner D | istric | et | | 6,235 | 62 | | |
| Comins | | 66 | | | 4,722 | 00 | | |
| Dearborn | | 66 | | | 9,575 | 61 | | |
| Dillaway | | 66 | | | 5,245 | 13 | | |
| Dudley | | 66 | | | 9,093 | 25 | | |
| Dwight | • | 66 | | | 6,822 | 26 | | |
| Edward Ev | erett | 66 | | | 5,233 | 77 | | |
| Eliot | | 66 | | | 6,321 | 02 | | |
| Emerson | | 66 | | | 7,050 | 46 | | |
| Everett | | 6.6 | | | 7,096 | 40 | | |
| Franklin | | 6.6 | | | 8,988 | 60 | | |
| Frothinghan | n | 66 | | | 6,419 | 13 | | |
| Gaston | | 66 | | | 5,991 | 94 | | |
| George Puti | nam | 66 | | | 3,019 | 00 | | |
| Carrie | l forwa | ard, | | | \$148,320 | 63 | \$917,751 | 57 |

| Brought forward | d, | \$ | 3148,320 | 63 | \$917,751 57 |
|---------------------|-------|-----|----------|----|--------------|
| Gibson District . | | | 3,475 | 12 | |
| Hancock ". | • | | 10,449 | 58 | |
| Harris ". | | | 3,832 | 74 | |
| Harvard " . | | • _ | 8,386 | 18 | |
| Henry L. Pierce Dis | trict | | 1,854 | 88 | |
| Hugh O'Brien | 6 | | 8,822 | 13 | |
| Hyde | 6 | | 5,824 | 68 | |
| John A. Andrew | 6 | | 7,149 | 30 | |
| Lawrence | | | 12,898 | 40 | |
| Lewis | . 6 | | 6,833 | 60 | |
| Lincoln | | | 4,189 | 85 | |
| Lowell | 66 | | 10,462 | 16 | |
| Lyman | | | 6,126 | 45 | |
| Martin | | | 2,960 | 80 | |
| Mather | | | 6,600 | 33 | |
| Minot | 66 | | 3,228 | 13 | |
| Mt. Vernon | 6 6 | | 2,613 | 27 | |
| Norcross | 66 | • | 9,836 | 97 | |
| Phillips | 66 | | 4,354 | 23 | |
| Prescott | 66 | • | 5,932 | 79 | |
| Prince | 66 | | 2,489 | 53 | |
| Quincy | 6.6 | • | 9,644 | 60 | |
| Rice | 66 | | 5,398 | 30 | |
| Sherwin | 66 | | 6,524 | 00 | |
| Shurtleff | 66 | • | 4,227 | 46 | |
| Stoughton | " | | 2,992 | 34 | |
| Thomas N. Hart | 66 | • | 5,752 | 45 | |
| Tileston | 66 | • | 1,388 | 67 | |
| Warren | 66 | | 4,794 | 40 | |
| Wells | 66 | | 10,816 | 60 | |
| Winthrop | 6.6 | | 4,472 | 25 | |
| | | | | | |

Total for Primary Schools,

332,652 82

Carried forward,

\$1,250,404 39

| Brought fo | orward, | | | \$1,250, | 404 39 |
|----------------|-----------|---------|----------|----------|--------|
| Special Scho | ools. | | | | |
| Horace Mann | . \$9,74 | 8 17 | | | |
| Kindergartens | . 30,28 | 33 54 | | | |
| Manual Trainir | ng. 5,90 | 6 27 | | | |
| | | | \$45,937 | 98 | |
| Evening Sch | cools. | | | | |
| Evening High | | 72 00 | | | |
| Agassiz . | | 29 00 | | | |
| Allston . | . 57 | 72 50 | | | |
| Bigelow . | . 2,0 | 54 50 | | | |
| Comins . | . 2,08 | 37 00 | | | |
| Dearborn . | . 1,58 | 38 00 | | | |
| Eliot . | . 2,43 | 33 00 | | | |
| Franklin . | . 3,5 | 69 00 | | | |
| Hancock . | . 1,5 | 16 50 | | | |
| Lincoln . | . 1,6 | 44 00 | | | |
| Lyman . | . 1,7 | 08 00 | | | |
| Phillips . | . 1,2 | 39 00 | | | |
| Quincy . | . 1,7 | 41 50 | | | |
| Sherwin . | . 1,1 | 64 00 | | | |
| Warren . | . 1,6 | 83 50 | | | |
| Warren-st. Ch | apel, 6 | 32 00 | | | |
| Wells . | . 2,1 | 00 00 | | | |
| | | | 39,583 | 50 | |
| Evening Di | rawina Se | chools. | | | |
| Warren av. | • | 12 00 | | | |
| Tennyson st. | | 12 00 | | | |
| Charlestown | | 32 00 | | | |
| Roxbury . | | 72 00 | | | |
| East Boston | | 72 00 | | | |
| , | | | 9,200 | 00 | |
| | | | | | |

Carried forward, \$94,721 48 \$1,250,404 39

| Brought forward, Special Instructors. Music . \$13,200 00 Drawing . 3,000 00 Military Drill and Armorer . 2,800 00 Physical Training 750 00 | \$94,721 | 48 | \$1,250,404 39 |
|--|-----------|-----|----------------|
| | 19,750 | 00 | |
| Total for Special Schools and | | | |
| Special Instructors . | | • | 114,471 48 |
| Total for School Instructors | , . | • | \$1,364,875 87 |
| SALARIES OF | JANITORS | | |
| Amount paid during the year | | | \$103,420 72 |
| FUEL, GAS, A | AND WATER | ₹. | |
| Fuel | | | \$58,120 79 |
| Gas | | | 6,026 95 |
| Water | | • | 5,376 80 |
| Total | | | \$69,524 54 |
| SUPPLIES AND | INCIDENTA | LS. | |
| Books | | • | \$41,074 14 |
| Phil. apparatus and supplies | | | 1,543 44 |
| Slates, erasers, etc | | | 1,695 01 |
| Pianos; tuning, repairs, etc. | | • | 1,978 00 |
| Expressage | | • | 85 45 |
| Extra labor and clerk-hire | | | 145 50 |
| Printing | | | 6,119 45 |
| Diplomas | | | 1,579 86 |
| Maps and globes | | • | 459 39 |
| Car and ferry tickets . | | • | 1,368 09 |
| Carried forward, | | | \$56,048 33 |

| Brought forwa | rd, | | | | | \$56,048 | 33 |
|------------------------|-------|--------|-------|--------|------|---------------|-----------|
| Stationery, drawing | g m | ateria | ls, | and p | ost- | | |
| age | • | • | | | | 12,052 | 08 |
| Advertising . | | | | | | 300 | 64 |
| Annual festival. | • | | • | | | 2,100 | 83 |
| Delivering supplies | | | | | • | 5,441 | 67 |
| Janitors' supplies | | • | • | | | 4,400 | 96 |
| Horse and carriage | exp | enses | and | carria | ige- | | |
| hire | • | • | • | | | 513 | 11 |
| Census, including bo | oks | • | | • | | 1,300 | 00 |
| Military drill, arms, | etc. | | • | | | 373 | 88 |
| Manual training supp | plies | | | • | • | 1,386 | 80 |
| Kindergarten supplie | es | | • | | | 1,389 | 69 |
| Reports of proceeding | gs of | Schoo | ol Co | ommit | tee, | 300 | 00 |
| Sewing materials | • | • | | • | | 217 | 26 |
| District Telegraph a | nd re | ent of | tele | phone | s . | 293 | 70 |
| Sundries | • . | | • | • | • | 109 (| 62 |
| Total for Supplies | and | Incid | enta | ls . | • | \$86,228 | 57 |
| TOTAL AMOUNT EX | PENI | DED B | Y T | HE SCI | ноог | COMMITTEE. | |
| Salaries of officers | | | | | | \$60,112 8 | 33 |
| Salaries of instructor | s | • | | • | | | 87 |
| Salaries of janitors | | | | | | 103,420 7 | 72 |
| Fuel, gas, and water | | | | | | 69,524 5 | 54 |
| Supplies and incident | | | • | | | 86,228 5 | 57 |
| Total expenditure | from | the a | ppro | priati | on, | \$1,684,162 |)3 |
| Expended for Dorch | este | r Scho | ools, | from | in- | | |
| come of the Gibson | ı fun | d | • | • | • | 1,198 2 | 25 |
| Gross expenditure | | | | | | \$1,685,360 2 | 28 |
| Less income . | | | | | | 41,209 0 | |
| Net expenditure fo | | | | | | | |

APPROPRIATIONS EXPENDED BY PUBLIC BUILD-ING DEPARTMENT.

| 0 | Grammar, and Primary | | | | \$235,000 | 00 |
|--------|-------------------------|------|------------|------------|-----------|----|
| | p-place Primary Scho | ol, | repairs, f | or- | | |
| | ard from 1889-90 . | | • | • | 1,504 | 88 |
| - | visitions in accordance | | | | | |
| 1890. | May and June . | • | \$24,559 | | | |
| 6.6 | July | • | 22,238 | 61 | | |
| 66 | August | • | 9,328 | 05 | | |
| 66 | September . | • | 54,557 | 50 | | |
| 66 | October | • | 83,910 | 22 | | |
| 66 | November . | • | 18,189 | 70 | | |
| 6.6 | December . | • | 8,027 | 35 | | |
| 1891. | January | | 8,509 | 39 | | |
| 6.6 | February | | 5,052 | 4 9 | | |
| 66 | March | | 15,661 | 34 | | |
| " | April | | 13,825 | 68 | | |
| 1890. | September, addition | al | | | | |
| | appropriation | | | | 2,000 | 00 |
| 1891. | Special appropriation | n, | | | 25,000 | |
| 66 | April balance. Tran | | | | , , , | |
| | ferred by Auditor | | | | 355 | 28 |
| | | | \$263,860 | 16 | \$263,860 | 16 |
| | PUBLIC BUILD | TATA | O + DEDA | D/DM | Ta Na | |
| | | 11/1 | J DEPA | KIM | | |
| Furnit | | | • | • | \$36,945 | |
| | ntry, lumber, and har | | | • | 40,546 | |
| | g-apparatus and vent | | or . | • | 31,472 | |
| Mason | ry, paving, drains, et | tc. | | • | 30,497 | 27 |
| Rents | and taxes:— | | | | | |
| Prin | mary Schools . | | \$5,073 | 67 | | |
| | mmar Schools . | • | 3,404 | 96 | | |
| C | Carried forward, | | \$8,478 | 63 | \$139,461 | 83 |

| Brought forward, \$8,478 63 | \$139,461 83 |
|---|----------------|
| Evening Drawing School, E.B., 940 00 | \$100,±01 00 |
| Drill Halls, E.B. High and | |
| Roxbury High 450 00 | |
| TF: 1 | |
| Kindergartens 750 00 | 10,618 63 |
| Painting and glazing | 26,121 55 |
| Whitening and plastering | 11,958 22 |
| Gas-fitting | 2,526 38 |
| Blackboards | 4,596 97 |
| Locks, keys, and electric bells | 1,576 14 |
| Roofing, gutters, and conductors | 10,387 52 |
| Iron and wire work | 1,716 72 |
| Watering streets, care of grounds, and | |
| grading | 3,963 06 |
| Sash-elevators and weather-strips | 1,519 10 |
| Plumbing | 12,353 60 |
| Teaming and supplies | 4,671 28 |
| Asphalt in cellars and yards | 3,470 39 |
| Cleaning buildings | 393 95 |
| Miscellaneous, including: — | |
| Horse-shoeing, care of horses, repairs on | |
| carriages, car and ferry fares | 1,499 75 |
| Salaries | 7,200 00 |
| Advertising, stationery, postage, etc | 193 22 |
| Rent, repairs of boxes, auxiliary fire- | |
| alarm system, and repairs | 4,431 00 |
| Paving assessments and damage by drain, | 560 00 |
| Cleaning vaults | 1,516 30 |
| Flag-staffs, new and care | 849 55 |
| Fuller & Warren system of heating and | |
| ventilation | 12,275 00 |
| 0 | A200 200 10 |
| Gross expenditure | \$263,860 16 |
| Less income | 208 00 |
| Net expenditure, Public Building Department | , \$263,652 16 |
| | |

PUBLIC SCHOOLS.

The Public Schools of the city proper and its annexed wards comprise one Normal School, two Latin Schools, eight High Schools, and fifty-five Grammar Schools. Each Grammar School represents a district, in which are located Primary Schools, occuping in total ninety-nine Primary buildings, thirty-eight rooms in various Grammar Schoolhouses, one room in a Kindergarten building, and fifteen hired rooms in thirteen different buildings. A hired room in each of two of these buildings is also occupied by a Grammar class, and three hired rooms in two other buildings, and thirty-one rooms in Primary School buildings are occupied by Grammar classes.

NORMAL, LATIN, AND HIGH SCHOOLS.

| Name. | Location. | No. of feet in lot. | When built. | Valuation, May, 1890. | | No. c | | No. of regular instructors. | Remarks. |
|----------------------------------|--|---------------------|-------------|--------------------------|------|-------|-------|--------------------------------|--|
| Normal | Dartmouth street | ••• | | | 2 | and | hall | | Occupies the upper story of the Rice and one room in the Appleton- street School- |
| Latin | Dartmouth and Montgomery sts. and Warren av. | 85,560 | 1880 | \$629,000 | 78 a | and 2 | halls | 15 | house. (78) Including rooms for recitation and apparatus. |
| English High Girls' High | W. Newton street | 30,454 | 1870 | 273,400 | 66 | and | hall | | (66) Including rooms for recitation and apparatus. Occupies six |
| • | Kenilworth street | | | 46,300 | | | | 12 | rooms in Girls' High School building. |
| Dorchester High. | | 59,340 | | | | | | | Damadalad in |
| Charlestown High W. Roxbury High | • | 10,247 32,262 | | | | ana | nam | 9 | Remodeled in 1870 |
| *Brighton High, . | | 54,448 | | 1 | | and | hall | 3 | |
| *E. Boston High . | Meridian street . | 13,616 | 1884 | 72,500 | 6 | and | hall | 5 | Library and Court - rooms |
| Roxbury High | New, unoccupied | | | 174,800 | | | | | attached. |
| Total valuation | of High Schools. | | | \$1,437,700 | | | | | |

^{*} One additional temporary teacher employed in this school.

EXPENDITURES FOR THE NORMAL, LATIN, AND HIGH SCHOOLS.

Aggregate expenditures made by the Board of School Committee and the Public Building Department of the City Council, for the High Schools of the city, during the financial year 1890-91:—

| √ | |
|---|-----------------|
| Salaries of instructors | \$212,315 13 |
| Expenditures for text-books, maps, globes, | |
| drawing materials, stationery, etc | 13,136 41 |
| Janitors | 11,081 00 |
| Fuel, gas, and water | 9,490 27 |
| | \$246,022 81 |
| Public Building Department. | |
| Furniture, repairs, etc | 23,994 28 |
| Total expense for High Schools | \$270,017 09 |
| No. of instructors in High Schools, exclusive | |
| of temporary teachers, and special in- | |
| structors in French, German, Calisthenics, | |
| Drawing, Music, and Military Drill . | 117 |
| Salaries paid the same | \$203,049 13 |
| Average amount paid each instructor | \$1,735 46 |
| Temporary teachers employed during the year, | 9 |
| Salaries paid the same | \$1,753 20 |
| Average number of pupils belonging | 3,510 |
| Salaries paid to special instructors in French, | |
| German, and Calisthenics | \$7,512 80 |
| Average cost of each pupil | \$76 93 |
| Average number of pupils to a regular in- | |
| structor, including principal | 30 |
| * The original cost of the buildings and land | for the various |

* The original cost of the buildings and land for the various High Schools, including the new Roxbury High, amounted in the aggregate to about \$1,427,000; the assessed value is \$1,437,700, an increase of about \$10,700.

GRAMMAR SCHOOLS.

| Name. | Location. | No. of feet. in lot. | When built. | Valuation, May, 1890. | No. o | | Remarks. |
|-----------------|-----------------------|-------------------------|-------------|--------------------------|----------------|----------|--|
| Adams | Belmont sq., E.B | 21,000 | 1856 | \$78,400 | 13 and 1 | nall. 11 | Two primary classes in this building. |
| Agassiz | Brewer st., J.P | 33,518 | 1849 | 41,200 | 6 " | 9 | Inc. two in Fallon Hall. |
| *Aliston | Cambridge st., All. | 22,000 | 1878 | 59,900 | 10 " | 14 | Including two in Everett School. Occupied March |
| (Bennett | Chestn't Hill av.,Br. | 26,648 | 1874 | 66,700 | 7 " | 7 | 27, 1879. |
| Bennett B'ch. | Winship pl., Br | 19,712 | 1886 | 22,400 | 6 | 4 | |
| Bigelow | Fourth st., S.B | 12,660 | 1850 | 75,800 | 14 " | 15 | |
| Bowditch | Elm st., J.P | 18,613 | 1858 | 38,400 | 6 " | 8 | Inc. one in Green street. Remodeled in 1870. |
| Bowdoin | Myrtle street | 4,892 | 1848 | 70,700 | 12 | 10 | In 1870. |
| Brimmer | Common street | 11,081 | 1843 | 102,000 | 14 " | 15 | |
| Bunker Hill | Baldwin st., Ch'n | 19,690 | 1866 | 91,000 | 14 " | 15 | Primary School- house on this lot. |
| Chapman | Eutaw st., E.B | 20,500 | 1850 | 71,800 | 13 " | 13 | |
| Chas. Sumner . | Ashland st., W.R | 30,000 | 1877 | 43,600 | 10 " | 13 | Inc. one in Wash ington-st. School and one in Flor- |
| *Comins | Tremont st., Rox | 22,169 | 1856 | 80,200 | 13 " | 11 | ence-st. School. |
| *Dearborn | Dearborn pl., Rox. | 36,926 | 1852 | 54,200 | 14 " | 14 | |
| Dillaway | Kenilworth st., Rox. | 21,220 | 1882 | 101,200 | 12 " | 12 | |
| Dudley | Dudley st., Rox | 26,339 | 1874 | 122,900 | 14 " | 15 | |
| Dwight | W. Springfield st | 19,125 | 1857 | 98,700 | 14 " | 14 | |
| *Edw. Everett . | Sumner st., Dor | 43,738 | 1876 | 47,300 | 10 " | 11 | Including one in old EdwEverett School. Old EdwEverett School- |
| †(Eliot | North Bennet st | 11,077 | 1838 | 93,000 | 14 " | 20 | house on this lot. Inc. two in Pormort |
| Ware | North Bennet st | 6,439 | 1852 | 38,000 | 4 and w | | School. |
| Emerson | Prescott st., E.B | 39,952 | 1865 | 120,000 | room 16 and | hall. 16 | Inc. two at Orient Heights. Two pri- |
| Everett | W. Northampton st. | 32,409 | 1860 | 110,500 | 14 " | 15 | mary classes. |
| Franklin | Ringgold st | 16,439 | 1859 | 111,100 | 14 " | 15 | |
| Frothingham | Prospect st., Ch'n | 22,079 | 1874 | 97,600 | 16 " | 13 | Four primary classes. |
| Valuatio | n carried forward . | | | \$1,836,600 | | | |

^{*} One additional temporary teacher employed in this school. † Two additional temporary teachers employed in this school.

Grammar Schools. - Continued.

| Name. | Location. | No. of feet in lot. | When built. | Valuation, May, 1890. | No. of rooms. | No. of. instructors. | Remarks. |
|-----------------|-----------------------------------|------------------------|-------------|--------------------------|---------------|-------------------------|---|
| Valuation | brought forward . | | | \$1,836,600 | | | |
| Gaston | East Fifth st., S.B., | 35,358 | 1872 | 54,400 | 14 and hall | . 14 | Inc. two in Benja- min Pope School. Three primary |
| George Putnam | Seaver st., Rox | 33,750 | 1880 | 38,400 | 10 " | 8 | classes. Three primary |
| †Gibson | Columbia st., Dor. | 25,087 | 1872 | 53,000 | 8 | 9 | classes. Inc. four in old Gibson School. Occupies Atherton School-house. Two primary classes. |
| †Hancock | Parmenter st | 28,197 | 1847 | 85,000 | 14 " | 13 | Inc. one in Ingra- ham School. Cush- man School-house |
| *Harris | Adams st., Dor | 37,150 | 1861 | 35,000 | 9 " | 7 | on this lot. Inc. one in Dorchester-avenue School. Three primary |
| Harvard | Devens st., Ch'n | 16,306 | 1871 | 112,400 | 14 " | 14 | One room occupied by a school of cookery. |
| Henry L. Pierce | Thetford avenue, Dorchester | 29,879 | 1875 | 18,700 | 4 | 7 | Including one in |
| Hugh O'Brien . | Dudley st., Rox | 36,954 | 1887 | 126,300 | 14 " | 15 | Armandine street. Occupied Sept.,1887. |
| *Hyde | Hammond st., Rox., | 20,754 | 1884 | 80,800 | 14 "" | 13 | 1 |
| John A. Andrew | Dorchester st., S.B., | 24,889 | 1876 | 75,000 | 16 " | 15 | |
| *Lawrence | B and Third streets, S.B | 14,343 | 1856 | 74,300 | 14 " | 18 | |
| *Lewis | Sherman st., Rox. | 27,850 | 1868 | 83,90 | 12 " | 13 | School. |
| *Lincoln | Broadway, S.B | 24,560 | 1859 | 45,30 | 0 14 " | 11 | |
| Lowell | Centre st., Rox | 35,241 | 1874 | 62,40 | 0 14 " | 15 | 1 |
| Lyman | Paris st., E.B | 26,200 | 1870 | 117,00 | 0 14 " | 14 | |
| Martin | Huntington avenue, | 30,000 | 1885 | 77,00 | 0 14 " | 10 | Three primary classes. |
| Mather | Meeting House Hill, Dorchester | 132,500 | 1872 | 90,40 | 0 10 " | 12 | Primary School and |
| Minot | Neponset avenue, Neponset | 31,500 | 1885 | 66,30 | 0 7 " | 8 | engine-house on this lot. |
| Mt. Vernon | Mt.Vernon st., W.R. | 22,744 | 1862 | 13,10 | 0 4 " | 4 | Including one in Washington-street School, and one in Centre-street School. |
| Valuation | a carried forward . | | | \$3,145,30 | 00 | | |

^{*} One additional temporary teacher employed in this school. † Two additional temporary teachers employed in this school.

Grammar Schools. - Concluded.

| Name. | Location. | No. of feet in lot. | When built. | Valuation, May, 1890. | No. of rooms. | No. of instructors. | Remarks. |
|-----------------|----------------------|------------------------|-------------|--------------------------|---------------|---------------------|---|
| Valuation | brought forward . | | | \$3,145,300 | | | |
| *Norcross | D street, S.B | 12,075 | 1868 | 79,700 | 14 and hall | 14 | |
| Phillips | Phillips street | -11,1 90 | 1862 | 100,800 | 14 " | 16 | Including one in |
| Prescott | Elm street, Ch'n . | 16,269 | 1857 | 47,100 | 10 " | 11 | Grant School. |
| Prince | Exeter street | 22,960 | 1875 | 149,000 | 12 " | 11 | Inc. one in Huntington ave. Three |
| Quincy | Tyler street | 12,413 | 1847 | 101,200 | 14 " | 12 | primary classes. One primary class. |
| Rice | Dartmouth street . | 27,125 | 1869 | 145,500 | 14 '' | 12 | Upper story occupied by Normal School. |
| *Sherwin | Madison sq., Rox | 32,040 | 1870 | 104,200 | 16 " | 12 | Four prim'y classes. |
| Shurtleff | Dorchester st., S.B. | 40,553 | 1869 | 131,500 | 14 " | 15 | |
| Stoughton | River st., Dor | 29,725 | 1856 | 23,600 | 8 | 11 | Inc. four in Bailey- st, School. Two primary classes. |
| *Thomas N. Hart | E. Fifth st., S.B. | 37,500 | 1889 | 167,400 | 13 " | 9 | Three prim. classes. |
| Tileston | Norfolk st., Dor | 83,640 | 1868 | 40,000 | 8 " | 3 | Two prim'y classes. |
| Warren | Summer st., Ch'n . | 14,322 | 1867 | 80,000 | 14 " | 14 | One primary class. |
| Wells | Blossom střeet | 10,770 | 1868 | 97,000 | 10 " | 12 | Inc. one in Blossom- street School. |
| Winthrop | Tremont street | 16,100 | 1855 | 239,000 | 14 " | 18 | Inc. one in Starr- King and one in East-st. School. |
| Total valuation | of Grammar Schools | • • • • | | \$4,651,300 | | | |

^{*}One additional temporary teacher employed in this school. [Five of the Grammar instructors now teach in hired rooms.]

EXPENDITURES FOR THE GRAMMAR SCHOOLS.

| Aggregate expenditure | es n | nade l | y th | e Boa | ard of School |
|--------------------------|-------|----------|--------|---------|----------------|
| Committee and the Public | e Bu | ilding | Depa | artmei | nt of the City |
| Council, for the Gramman | · Scl | rools c | f the | e city, | for the finan- |
| cial year 1890-91: — | | | | | |
| Salaries of instructors | | | | | \$705,436 44 |
| Expenditures for text-bo | oks, | maps | , glol | bes, | |
| writing and drawing ma | ateri | als, sta | atione | ery, | |
| etc | | | | | 35,727 37 |
| Janitors | | | | | 49,914 50 |
| | | | | | 32,050 26 |
| | | | | | |
| D. H. D. H. Dan a | | | | | \$823,128 57 |
| Public Building Depar | | | | | 145 010 00 |
| Rent, Furniture, Repairs | , etc | • • | • | • | 145,016 92 |
| Total expense for G | ramn | nar Sc | hools | | \$968,145 49 |
| Number of instructors in | Gra | mmar | scho | ols, | |
| exclusive of temporar | y te | achers | , Sev | ving | |
| instructors, and spec | ial | instru | ctors | in | |
| Drawing and Music | | | | | 683 |
| Salaries paid the same | | | | | \$681,969 56 |
| Average amount paid ead | | | | | \$998 49 |
| Temporary teachers em | ploy | ed du | ring | the | |
| year | | | _ | | 54 |
| Salaries paid the same | | | | | \$6,659 88 |
| Average number of pupil | | | | | 31,675 |
| Average cost of each pur | | _ | _ | | \$30 56 |
| Average number of pup | | | | | |
| including principal, an | | | | | |
| cial instructors above 1 | | | | • | 46 |
| Twenty-nine instructo | | | ing v | vere e | employed, who |
| | | | C | | |

taught 237 divisions. The salary paid varies according to the number of divisions taught. Total amount paid to Sewing instructors, \$16,807; average amount paid to each in-

structor, \$579.55.

PRIMARY SCHOOLS.

| | | 1 | | | | |
|-------------------|--------------------|---------------------|-------------|--------------------------|---------------|---------------------|
| Name. | Location. | No. of feet in lot. | When built. | Valuation, May, 1890. | No. of rooms. | No. of instructors. |
| *Adams | Belmont sq., E.B. | | | | | 2 |
| Adams street | Dorchester | 44,555 | 1861 | \$5,600 | 2 | t |
| Andrews | Genesee street | 5,393 | 1848 | 24,000 | 3 | 3 |
| Appleton street . | | 18,454 | 1870 | 84,300 | 12 | 7 |
| *Atherton | Columbia st., Dor. | | | | 8 | 2 |
| Auburn | School st., Br | 12,340 | | 11,700 | 4 | 3 |
| Austin | Paris street, E.B. | 5,360 | 1849 | 24,800 | 6 | 5 |
| Avon place | Roxbury | 10,057 | 1851 | 16,000 | 4 | 4 |
| †Bailey street . | Dorchester | 21,838 | 1880 | 10,200 | 5 | 1 |
| Baker street | West Roxbury . | 10,464 | 1855 | 2,500 | 1 | 1 |
| Baldwin | Chardon court | 6,139 | 1864 | 39,000 | 6 | 5 |
| Bartlett street | Rexbury | 7,627 | 1846 | 30,700 | 6 | 5 |
| Benjamin Pope . | O st., S.B | 20,000 | 1883 | 54,000 | 8 | 6 |
| Bunker Hill Pr | Charles st., Ch'n. | | | 15,000 | 8 | 8 |
| †Canterbury st | West Roxbury . | 20,121 | 1864 | 4,800 | 2 | 2 |
| Capen | Sixth st., S.B | 12,354 | 1871 | 36,200 | 6 | 6 |
| Centre street | West Roxbury . | 5,644 | | 6,000 | 4 | 3 |
| Chestnut avenue. | Jamaica Plain | 13,733 | | 7,100 | 2 | 2 |
| Child street | Jamaica Plain | 26,374 | | 12,600 | 2 | ‡ |
| Clinch | F st., S.B | 13,492 | 1871 | 40,800 | 6 | 6 |
| Common street . | Charlestown | 7,001 | | 20,400 | 6 | 4 |
| †Concord street . | W. Concord st | 10,756 | 1845 | 76,100 | 10 and ward- | 10 |
| †Cook | Groton street | 8,177 | 1852 | 25,000 | room. | 5 |
| Cross street | Charlestown | 1,708 | | 6,400 | 2 | 2 |
| Cushman | Parmenter street. | | 1867 | 97,000 | 16 | 11 |
| Cyrus Alger | Seventh st., S.B. | 16,560 | 1880 | 66,600 | 8 | 8 |
| Dorchester av | Dorchester | 27,808 | 1883 | 20,000 | 4 | 2 |
| Drake | C st., S.B | 10,260 | 1869 | 40,300 | 6 | 5 |
| †East street | | 7,140 | 1866 | 61,000 | 9 | 6 |
| *Emerson | Prescott st., E.B. | | | | | 2 |
| | | 1 | | | | |

^{*}In Grammar building.

[†] One additional temporary teacher employed in this school.

[†]One room occupied by a School of Cookery.

^{||} Four additional temporary teachers employed in this school.

Primary Schools. - Continued.

| Name. | Location. | No. of feet in lot. | When built. | Valuation May, 1890. | | No. of instructors. |
|-------------------|----------------------------|---------------------|-------------|-------------------------|-----|---------------------|
| Emerson | Poplar street | 5,924 | 1861 | \$35,700 | 6 | 6 |
| Eustis street | Roxbury | 13,534 | 1848 | 22,000 | 4 | 4 |
| Everett | Pearl st., Bri | 44,237 | | 9,500 | 2 | 1 1 |
| Florence street . | Roslindale | 25,030 | 1862 | 6,800 | . 9 | 5 |
| Fourth street | Cor. Dorch'r { st., S.B. } | | | | 2 | 2: |
| Francis street . | | 12,074 | 1853 | 24,200 | 6 | 01 |
| ‡ Freeman | Charter street | 5,247 | 1868 | 39,000 | 6 | 4 |
| Fremont place . | Charlestown | 7,410 | | 6,700 | 1 | r |
| *Frothingham | Prescott st., Ch'n | | | | | 4 |
| *Gaston | L, cor. Fifth t., S.B. | | | | | 3: |
| *George Putnam. | Seaver st., Rox | | | | | 3: |
| George street | Roxbury | 18,894 | 1861 | 51,200 | 6 | 55 |
| Gibson | School st., Dor | 44,800 | 1857 | 25,600 | 6 | 3. |
| Glen Road | Dorchester | 25,827 | 1880 | 7,500 | 2 | 1 |
| Grant | Phillips street | 3,744 | 1852 | 26,500 | 4 | 2 |
| Green street | Jamaica Plain | 11,627 | | 8,600 | 2 | 2 |
| *Harris | Adams st., Dor. | | | | | 3 |
| Harvard Hill | Harvard st., Ch'n | 4,645 | | 22,400 | 8. | 8 |
| Haverhill street. | Charlestown | 5,399 | | 6,000 | 2. | 2 |
| Hawes Hall | Broadway, S.B | 16,647 | 1823 | 55,500 | 8 | 8 |
| Heath street | Roxbury | 10,669 | 1857 | 6,200 | 2 | 2 |
| Hobart street | Faneuil | 10,000 | 1884 | 6,800 | 2 | r |
| Howard avenue. | Dorchester | 29,090 | 1882 | 60,000 | 6 | 5 |
| Howe | Fifth st., S.B | 12,494 | 1874 | 48,700 | 8 | 7 |
| ngraham | Sheafe street | 2,354 | 1848 | 16,000 | 3 | 2 |
| Joshua Bates | Harrison av | 19,977 | 1884 | 57,900 | 8 | 6 |
| ucretia Crocker, | Parker st., Rox | 30,000 | 1884 | 63,500 | 8 | 8 |
| Martin | Huntington av., Rox. | | | | | 3 |
| father | Broadway, S.B. | 10,160 | 1842 | 55,800 | 12 | 6 |
| fead street | Charlestown | 5,857 | 1847 | 18,500 | 4 | 4 |
| fedford street . | | 12,112 | 1886 | 24,400 | 4 | 2 |
| foulton street . | ** | 8,130 | | 23,300 | 4 | 4 |

^{*} In Grammar building.

[†] Occupied by two Grammar classes.

[†] Two additional temporary teachers employed in this school.

^{||} Unoccupied since November, 1890.

Primary Schools. - Continued.

| Name. | Location. | No. of feet in lot. | When built. | Valuation, May, 1890. | No. of rooms. | No. of instructors. |
|-------------------|---------------------------|---------------------------|-------------|--------------------------|---------------|---------------------|
| Mt. Pleasant av., | Roxbury | 9,510 | 1847 | \$8,800 | 2 | 2 |
| Munroe street | " | 11,910 | 1854 | 10,800 | 2 | 2 |
| Noble | Princeton street, E.B | 17,500 | 1874 | 55,200 | 8 | 6 |
| North Harvard st. | Brighton | 20,750 | 1848 | 17,700 | 4 | 3 |
| Oak square | " | 9,796 | | 6,000 | 2 | 1 |
| †Old Almshouse, | Hancock st., Dor. | | | | 2 | 1 |
| Old Edw. Everett | Sumner st., " | | 1885 | 11,500 | 7 | 4 |
| Old Dor. High | Dorch'ter av., " | 34,460 | | 5,700 | 4 | 3 |
| Old Mather | Meet'g-house Hill, Dor | | 1856 | 11,600 | 7 | 7 |
| Orient Heights . | East Boston | 24,000 | 1883 | 10,400 | 3 | 1 |
| Parkman | Silver st., S.B. | 5,306 | 1848 | 23,200 | 6 | 4 |
| Phillips street | Roxbury | 20,355 | 1867 | 60,200 | 8 | 6 |
| Polk street | Charlestown | 12,143 | 1878 | 32,800 | 6 | 6 |
| Pormort | Snelling place | 4,373 | 1855 | 19,400 | 6 | 4 |
| *Prince | Exeter street | | | | | 3 |
| *Quincy | Tyler street | | | | | 1 |
| Quincy street | Dorchester | 20,000 | 1882 | 6,000 | 2 | 2 |
| Quincy street | Roxbury | 23,453 | 1875 | 31,400 | 8 | 4 |
| Roxbury street . | " | 14,147 | 1874 | 49,100 | 8 | 7 |
| Rutland street | | 7,850 | 1851 | 36,800 | 6 | 3 |
| †Savin Hill | Dorchester | 20,020 | 1884 | 10,000 | 2 | 1 |
| Sharp | Anderson street . | 5,611 | 1824 | 43,300 | 6 | 5 |
| *Sherwin | Madison sq., Rox. | | | | | 4 |
| Simonds | Broadway, S.B. | | 1840 | 18,500 | 3 | 3 |
| Skinner | Fayette street | 5,238 | 1870 | 45,700 | 6 | 6 |
| Somerset street . | | 6,300 | 1824 | 66,500 | 4 | 3 |
| Starr King | Tennyson street . | 11,095 | 1870 | 102,700 | 10 and hall. | 2 |
| *Stoughton | River st., Dor. | | | | | 2 |
| Tappan | Lexington street, | 11,500 | 1873 | 50,400 | 8 | 6 |
| *Thomas N. Hart | E. Fifth st., S.B., | | | | | 3 |
| Thomas street | Jamaica Plain | 10,754 | | 8,200 | 4 | 3 |
| Thornton street . | Roxbury | 6,640 | 1847 | 6,500 | 2 | 2 |
| Ticknor | Washington Village, S.B | 11,486 | 1865 | 50,700 | 12 | 11 |

^{*} In Grammar building.
† One additional temporary teacher employed in this school.

Primary Schools. - Concluded.

| Name. | Location. | No. of feet in lot. | When built. | Valuation, May, 1890. | No. of rooms. | No. of instructors. |
|-------------------------------|-----------------------------|---------------------------|-------------|--------------------------|---------------|---------------------|
| *Tileston | Norfolk st., Dor. | | | | | . 2 |
| ‡Tuckerman | City Point, S.B | 11,655 | 1850 | \$15,500 | 6 | 5 |
| Tyler street | | 3,900 | 1855 | 42,200 | 6 | 6 |
| Union street | Brighton | 67,280 | | 12,400 | 2 | 1 |
| Vernon street | Roxbury | 7,675 | 1849 | 10,900 | 4 | 4 |
| Vernon street | Cor. Auburn st., Roxbury | | | | † 2 | 2 |
| Wait | Shawmut av | 16,341 | 1860 | 98,100 | 8 | 7 |
| Walnut street | Neponset | 22,790 | 1856 | 22,500 | 7 | 4 |
| * Warren | Summer st., Ch'n. | | | | | 1 |
| Washington street | Forest Hills | 27,450 | 1870 | 5,900 | 2 | 1 |
| Washington street | Germantown | 13,159 | | 4,300 | 2 | ı |
| Washington st., near Green | Jamaica Plain | 12,491 | | 6,100 | 2 | 2 |
| Way street | | 2,508 | 1850 | 17,500 | 3 | 3 |
| ‡Webb | Porter st., E.B. | 7,492 | 1853 | 23,700 | б | 3 |
| Webster | Webster pl., Bri. | 19,761 | | 11,500 | 4 | 4 |
| Webster street . | East Boston | 5,036 | 1852 | 22,500 | 6 | 4 |
| Weston street | Roxbury | 14,973 | 1877 | 55,000 | 8 | 8 |
| ‡Winchell | Blossom street . | 13,540 | 1885 | 106,200 | 12 | 9 |
| Winship | Winship pl., Bri. | 24,259 | 1861 | 15,100 | 4 | 4 |
| Winthrop street. | Roxbury | 9,775 | 1857 | 10,900 | 4 | 4 |
| ‡ Yeoman street. | Roxbury | 18,200 | 1870 | 63,600 | 12 | 8 |
| Total valuation | of Primary Schools | | | \$2,909,400 | | |

^{*} In Grammar building.

[†] Two rooms in a dwelling-house purchased for school purposes.

[‡] One additional temporary teacher employed in this school.

In addition to the foregoing the following rooms have been hired for the use of seventeen Primary classes and five Grammar classes. Rent and taxes paid for the same, for rooms occupied by three Kindergartens, and also for two rooms occupied by the East Boston Evening Drawing School and for military drill during the year, amounted to \$10,618.63.

| Name. | Location. | No. of rooms. | No. of instructors. | Remarks. |
|--|-------------------------------------|---------------|---------------------|--|
| Agassiz Branch | 705 Centre st., J. P. | 2 | 2 | Rent \$1,150 per annum. |
| Bowditch Branch . | 203 & 205 Green st. | 1 | 2 | Rent \$300 per annum. |
| Bowditch Branch . | 162 Green st. | *2 | 1 | Rent \$700 per annum. |
| Murray Chapel | 400 Bunker Hill st., Charlestown | 1 | 2 | Rent \$350 per aunum. |
| Carey Hall | Clarendon Hills | 1 | 1 | Rent \$360 per annum. |
| M. E. Chapel | Sheldon st., Roslin dale | 1 | 0 | Rent \$300 per annum. Unoccupied since Feb. |
| Prospect Lodge Hall | Washington st., Roslindale | 1 | 0 | 1, 1891. Rent \$600 per annum. Unoccupied since Feb. 1, 1891. |
| George Putnam Branch | School st., Rox | *2 | 1 | Rent \$200 per annum. |
| H. L. Pierce Branch | 100 Armandine st., Dor | 2 | 2 | Rent \$480 per annum. |
| H. L. Pierce Branch | 122 Armandine st., Dor | 2 | 2 | Rent \$480 per annum. |
| M. E. Chapel | Stanton av., Dor | 1 | 1 | Rent \$550 per annum. |
| Lincoln Branch | Hawes place | 2 | 0 | Rent \$1,500 per annum. Unoccupied since May 1, 1890. |
| Boylston Chapel | Danforth st., J. P | 1 | 1 | Rent \$200 per annum. |
| Nawn's Building . | Centre st., Rox | 2 | 2 | Rent \$720 per annum. |
| Prince Branch | Huntington av | 2 | 2 | Rent \$1,100 per annum. |
| Day's Chapel | Parker st., Rox | 1 | 1 | Rent \$350 per annum. |
| Stoughton Branch . | I.O.O.F. Building, | *2 | | D 0400 |
| East Boston Evening | Dor | | 4 | Rent \$400 per annum. |
| Drawing School | Stephenson's Block. | 5 | 4 | Rent \$940 per annum. |
| Drill Hall, Roxbury High School | Bacon's Hall | 1 | | Rent \$350 per annum. |
| Drill Hall, East Bos- ton High School . | Bank Building, Maverick sq | 1 | | Rent \$200 per annum. Unoccupied since April 1, 1891. Rent \$600 per annum, |
| Maverick Chapel | Bennington st., E.B. | 1 | 1 | and heating. |

^{*} One room occupied by a Kindergarten.

EXPENDITURES FOR THE PRIMARY SCHOOLS.

| Aggregate expenditures made by the Bo | ard of School |
|---|-------------------|
| Committee and the Public Building Departme | ent of the City |
| Council, for the Primary Schools of the city, | for the financial |
| year 1890–91:— | |
| Salaries of instructors | \$332,652 82 |
| Expenditures for text-books, charts, writ- | |
| ing and drawing materials, stationery, | |
| etc | 8,256 51 |
| Janitors | 38,654 43 |
| Fuel, gas, and water | 22,616 64 |
| | \$402,180 40 |
| Public Building Department. | *, |
| Rent, furniture, repairs, etc | 79,831 74 |
| Total expense for Primary Schools . | \$482,012 14 |
| Number of instructors in Primary Schools, exclusive of temporary teachers and special | |
| assistants | 463 |
| Salaries paid the same | \$325,121 84 |
| Average amount paid to each instructor . | \$702 21 |
| Temporary teachers employed during the | |
| year | 40 |
| Salaries paid the same | \$4,261 98 |
| Special assistants employed during the year, | 53 |
| Salaries paid the same | \$3,269 00 |
| Average number of pupils belonging | 24,035 |
| Average cost of each pupil | \$20 05 |
| Average number of pupils to an instructor. | 52 |

The original cost of the various buildings, with the land, used for Grammar and Primary Schools, to May 1, 1890, amounted in the aggregate to about \$6,627,500; the assessed value May 1, 1890, was \$7,560,700, — an increase of about \$933,200.

KINDERGARTENS.

| Name. | Location. | Valuation, May, 1890. | No. of instructors. | Remarks. |
|----------------------|----------------------|--------------------------|------------------------|-----------------------------|
| Noble | Princeton st., E.B. | | 2 | |
| Webb | Porter st., E.B | | 2 | |
| Common street | Common st., Ch'n, | | 2 | |
| Baldwin | Chardon court | | 2 | |
| Cushman | Parmenter street . | | 2 | |
| North Bennet street, | 39 North Bennet st. | | 4 | Two Kindergartens in this |
| North Margin street, | 64 North Margin st. | \$7,700 | 2 | building. |
| Sharp | Anderson street . | | 2 | |
| Winchell | Blossom street | | 2 | |
| Barnard Memorial, | Warrenton street . | | 1 | Room hired at an expense of |
| Pierpont | Hudson street | 30,000 | 2 | \$600 per annum. |
| Starr King | Tennyson street . | | 2 | |
| Prince | Newbury street . | | 1 | Established Sept., 1890. |
| Appleton street | Appleton street | | 2 | |
| Rutland street | Rutland street | | 2 | |
| Cook | Groton street | | 1 | Established Sept., 1890. |
| Howe | Fifth st., S.B | | 2 | |
| Thomas N. Hart . | E. Fifth st., S.B | | 3 | Established April, 1890. |
| Cottage place | Cottage pl., Rox | | 2 | |
| Quincy street | Quincy st., Rox | | 3 | Established Sept., 1889. |
| Ruggles street | 147 Ruggles st., Rox | | 2 | |
| Smith street | Smith st., Rox | 5,800 | 2 | Established Feb., 1890. |
| *Walpole street | Walpole st., Rox., | 40,200 | 2 | Established Sept., 1889. |
| Yeoman street | Yeoman st., Rox., | | 2 | Established Sept., 1889. |
| George Putnam | School st., Rox. | | 2 | Established Sept., 1890. |
| Jamaica Plain | 162 Green street . | | 2 | Established Sept., 1890. |
| Union street | Union st., Bri | | 2 | |
| †Field's Corner | Dorchester | | . 1 | Room hired at an expense of |
| Old Minot | Walnut st., Nep. | | . 2 | \$200 per annum. |
| Stoughton | 1.O.O.F. B'g, Dor. | | . 1 | Established Oct., 1890. |
| Total valuation o | f Kindergartens | \$83,700 | | |

^{*}A temporary Primary class in this building.

[†] A special assistant employed in this school.

| The expense | s of these | schools | were as | s follows:— |
|-------------|------------|---------|---------|-------------|
|-------------|------------|---------|---------|-------------|

| Salaries of instructors | • | | | | \$30,283 54 |
|-------------------------|--------|---------|----|---|-------------|
| Kindergarten materials, | pianos | s, etc. | • | • | 1,898 47 |
| Janitors | • | • | • | • | 732 50 |
| Fuel, gas, and water | • | • | • | | 301 31 |
| | | | | | \$33,215 82 |
| Public Building Dep | artme | nt. | | | |
| Repairs, etc | • | • | • | • | 1,157 74 |
| Total expense for I | Kinder | garten | s. | • | \$34,373 56 |

Average number of pupils, 1,699; cost per pupil, \$20.23.

SPECIAL SCHOOLS.

HORACE MANN SCHOOL FOR THE DEAF.

| Name. | Location. | No. feet in lot. | When built. | Valuation, May, 1890. | No. | No. instructors. |
|---------------|----------------|---------------------|-------------|--------------------------|-----|---------------------|
| Horace Mann . | Newbury street | 8,400 | 1890 | \$118,500 | 13 | 11 |

The expenses of the school were as follows: —

| Salaries of instructors . | | | • | | \$9,748 | 17 |
|-------------------------------|-------|-------|-------|---|----------|----|
| Expenses for books, stationed | ery, | etc. | • | • | 1,147 | 73 |
| Janitor | Ť | • | • | • | 680 | 00 |
| Fuel, water, and gas | | | • | | 524 | 78 |
| | | | | | | |
| | | | | | \$12,100 | 68 |
| - Public Building Departm | nent. | | | | | |
| Furniture, repairs, etc | | | | | 130 | 84 |
| Total expense for the s | schoo | ol | • | • | \$12,231 | 52 |
| Average number of pupils b | oelon | oino | | | | 85 |
| | | _ | | • | | |
| Average number of pupils t | o an | instr | uctor | • | | 8 |
| Average cost of each pupil | | | | | \$143 | 90 |

The city receives from the State \$100 for each city pupil, and \$105 from each out-of-town pupil. The amount received from this source the past year was \$8,629.59.

MANUAL TRAINING SCHOOLS.

| The expenses of these schools were a | as foll | lows: | |
|--------------------------------------|---------|-------|------------|
| Salaries of instructors | | | \$5,906 27 |
| Fuel, gas, and water | • | | 154 55 |
| Lumber, hardware, kitchen materials, | etc. | • | 1,280 93 |
| Public Building Department. | | | \$7,341 75 |
| Repairs, etc | • | | 132 12 |
| Total expense for these schools | | | \$7,473 87 |

EVENING SCHOOLS.

| Name. | Location. | Av. no. of instructors. | Remarks. |
|------------------------|---------------------------------|-------------------------|------------------------------|
| High | Montgomery street | 25) | |
| " Branch | Monument square, Charlestown | 6 } | In High School buildings. |
| " " | Meridian street, East Boston | 4 | ~ 411-412-621 |
| Agassiz School-house . | Burroughs street, Jamaica Plain | 3 | |
| Allston " | Cambridge street, Allston | 3 | |
| Bigelow " | Fourth street, South Boston | 10 | |
| Comins " | Tremont street, Roxbury | 10 | |
| Dearborn " | Dearborn place, Roxbury | 7 | |
| Eliot " | North Bennet street | 12 | |
| Franklin " | Ringgold street | 16 | |
| Hancock " | Parmenter street | 6 | |
| Lincoln " | Broadway, South Boston | 6 | |
| Lyman " | Paris street, East Boston | 7 | |
| Phillips " | Phillips street | 6 | |
| Quincy " | Tyler street | 7 | |
| Sherwin ," | Madison square, Roxbury | 5 | |
| Warren " | Summer street, Charlestown | 7 | |
| Warrenton street | Barnard Memorial, Warrenton st | 5 | |
| Wells School-house | Blossom street | 9 | |

EVENING DRAWING SCHOOLS.

| Name. | Locat | tion. | Av. no. of instructors. | Remarks. |
|--------------------|--------------------|--------------------|-------------------------|-----------------|
| Charlestown | Old City Hall | | 6 | |
| East Boston | Stevenson's Block | , Central square . | 4 | Hired at an ex- |
| Roxbury | Municipal Court by | ailding | 4 | per annum. |
| Tennyson street | Starr King School- | house | 5 | |
| Warren avenue | Latin School house | | 5 | |
| | EVENING | schools. | | |
| Salaries of instru | actors . | | . \$ | 39,583 50 |
| Expenses for boo | oks, stationer | y, etc | • | 1,608 53 |
| Janitors | | | • | 2,084 42 |
| Fuel and gas . | | • • | | 3,091 48 |
| | | | \$ | 46,367 93 |
| Public Buildin | ng Departmen | nt. | • | , |
| Repairs, furnitur | e, etc. | | | 410 23 |
| Total expen | se for Evenin | g Schools | . \$ | 46,778 16 |
| Average numb | | ** | | |
| High School, 5,3 | 375. | | | |
| Average numb | er of instruc | tors, 154. | | |
| Average cost | of each p | oupil for tl | he | |
| time, \$8.70. | | | | |
| E | EVENING DRAV | WING SCHOOL | LS. | |
| Salaries of instru | ctors | \$9,200 | 00 | |
| Drawing material | | | | |
| models, boards | e, etc. | 1,150 8 | 38 | |
| Janitors . | | 273 8 | 37 | |
| Fuel and gas | | 826 (|)7 | |
| | | | | |
| | | \$11,450 8 | 32 | |

| Brought forward, | \$11,450 82 | \$46,778 16 |
|---|----------------|----------------|
| Public Building Departmen | <i>t</i> . | |
| Repairs, furniture, etc | 1,722 29 |) |
| Total expense for Even- ing Drawing Schools . Number of instructors, 24. Average number belonging, 628. | | 13,173 11 |
| Average cost of each pupil for the time \$20.98 | | |
| Aggregate expense for all Eve | ening Schools | \$59,951 27 |
| EXPENDITURES FOR O | FFICERS . | AND SPECIAL |
| Salaries paid Superintendent | . Supervisors | |
| Secretary, Auditing Cler | • | |
| Clerks, and Messengers | | |
| Salaries paid seventeen Truan | t Officers | . 20,100 00 |
| " " five Music Instr | uctors . | . 13,200 00 |
| Salary paid Drawing Director | • • | 3,000 00 |
| " " Instructor in Phy | sical Training | g, 750 00 |
| Salaries paid Military Instru | uctor and A | ? - |
| morer | | . 2,800 00 |
| Stationery and record-book | s for School | ol |
| Committee and officers, | and office ex | K- |
| penses | | . 486 65 |
| Fuel, gas, and water . | | . 469 18 |
| Total | | |

INCIDENTAL EXPENSES.

These expenditures are made for objects not chargeable to any particular school, and consist chiefly of expenses for delivering supplies, printing, advertising, festival, board of horse, carriage-hire, tuning of pianos, and other items:—

| Annual Festival | \$2,100 | 83 |
|--|----------|----|
| Board of horse, with shoeing expenses and | | |
| sundry repairs of vehicles and harnesses . | 491 | 11 |
| Carriage-hire | 22 | 00 |
| Advertising | 300 | 64 |
| Census of school children | 1,300 | 00 |
| Printing, printing-stock, binding, and | | |
| postage | 6,727 | 83 |
| Diplomas | 1,579 | 86 |
| Extra labor and clerk-hire | 145 | 50 |
| Military drill, sundry repairs, and trans- | | |
| portation expenses of instructor | 281 | 88 |
| Teaming and expressage, including fares . | 85 | 45 |
| Tuning and repairing pianos | 1,320 | 00 |
| Expenses, delivering supplies for the year . | 5,441 | 67 |
| Reports of proceedings, School Committee, | 300 | 00 |
| District Telegraph, rent of telephones . | 293 | 70 |
| Car and ferry tickets for pupils and mes- | | |
| sengers | 386 | 41 |
| Twine, frames, and small items | 73 | 01 |
| Total | \$20,849 | 89 |

SPECIAL EXPENDITURES BY PUBLIC BUILDING DEPARTMENT AND SCHOOL COMMITTEE.

| Florence-street Primary School-house, enlargement | | | \$19,961 | 37 |
|---|-----|------|-----------|----|
| Grammar School-house site, Bowditch District . | | | 15,376 | 86 |
| Grammar School-house, Henry L. Pierce District | | | 595 | 18 |
| Thomas N. Hart Grammar School-house | | | 8,247 | 52 |
| Thomas N. Hart Grammar School-house, furnishing | | | 464 | 79 |
| Hancock Grammar School-house, enlargement. | | | 9,455 | 74 |
| New Roxbury High School-house | | | 87,819 | 50 |
| New Roxbury High School-house, furnishing . | | | 208 | 00 |
| Horace Mann School-house | | | 10,099 | 51 |
| Horace Mann School-house, furnishing | | | 6,562 | 49 |
| Primary School-house, Adams District | | | 6,076 | 94 |
| Primary School-house, Prince District | | | 418 | 93 |
| Prince School-house, enlargement of yard | | | 990 | 77 |
| Primary School-house, Bunker Hill District . | | | 6,246 | 30 |
| | | - | | |
| Total expenditure on account of new school-hou | ses | . \$ | \$172,523 | 90 |

RECAPITULATION.

TOTAL EXPENDITURES.

| School Committee. | | | | |
|----------------------------|------------|-------------|-------------|----|
| High Schools, per | detailed | statement, | \$246,022 | 81 |
| Grammar Schools, | • 6 | 6.6 | 823,128 | 57 |
| Primary Schools, | 6.6 | 66 | 402,180 | 40 |
| Horace Mann School, | " | 66 | 12,100 | 68 |
| Kindergartens, | 4.6 | 66 | 33,215 | 82 |
| Manual Training Schools | 3, " | 66 | 7,341 | 75 |
| Evening Schools, | 6.6 | 66 | 46,367 | 93 |
| Evening Drawing School | ls, " | 66 | 11,450 | 82 |
| Officers and Special Insti | ructors, p | er detailed | | |
| statement | | | 80,818 | 16 |
| Incidentals, per detailed | statemen | t | 20,849 | 89 |
| Stock purchased during | the yea | r but not | | |
| delivered | | • • | 685 | 20 |
| Carried forward, | | | \$1,684,162 | 03 |

| Brought forward, | \$1,684,162 03 |
|---|----------------|
| From income Gibson Fund expended for Dorchester schools | 1,198 25 |
| Gross expenditure | \$1,685,360 28 |
| Less income | 41,209 06 |
| Net expenditure, School Committee . | \$1,644,151 22 |
| Public Building Department. | |
| High Schools \$23,994 28 | |
| Grammar Schools 145,016 92 | |
| Primary Schools 79,831 74 | |
| Horace Mann School 130 84 | |
| Manual Training Schools . 132 12 | |
| Evening Schools 410 23 | |
| Evening Drawing Schools . 1,722 29 | |
| Kindergartens 1,157 74 | |
| Expenses not chargeable to any particular school . 11,464 00 | |
| Gross expenditure \$263,860 16 | |
| Less income | |
| Net expenditure, Building Department, | 263,652 16 |
| Total ordinary expenditure | \$1,907,803 38 |
| SPECIAL EXPENDITURES. | |
| Public Building and City Architect's Departments. | |
| High School, new building . \$88,027 50 Grammar Schools, new build- | |
| ings | |
| Primary Schools, new buildings 32,703 54 | |
| Horace Mann School, new | |
| building 16,662 00 | |
| Total | 172,523 90 |
| Net expenditure for the Public Schools, | \$2,080,327 28 |

INCOME.

School Committee.

| From State, for dea | f-mute | e scho | lars | | | \$8,629 | 59 |
|---------------------|--------|--------|--------|-------|-------|----------|----|
| Non-residents | | | | | | 8,258 | 38 |
| Gibson Fund | | | • | • | • | 1,306 | 67 |
| Smith Fund. | | • | • | | • | 384 | 00 |
| Stoughton Fu | ınd | • | • | • | • | 212 | 00 |
| Sale of books | • | | | | | 137 | 94 |
| Refunded by | State, | car-f | ares | • | • | 981 | 68 |
| Other sources | 3. | • | • | • | • | 21,298 | 80 |
| Total income, | , Scho | ool Co | mmit | tee | • | \$41,209 | 06 |
| Pubb | lic Bi | uildin | g De | partn | nent. | | |
| Amount received f | rom | rents | | | | | |
| collected | | | | \$101 | 00 | | |

| Amount received | fron | n rei | nts | | |
|-----------------|------|-------|-----|-------|----|
| collected . | | | | \$101 | 00 |
| Amount received | from | sale | of | | |
| old building | | | | 107 | 00 |

\$208 00

SCHOOLS. — ESTIMATES, 1891-92.

School Committee, Office of Accounts, Jan. 27, 1891.

HON. NATHAN MATTHEWS, JR., Mayor: -

DEAR SIR, — The Committee on Accounts of the School Committee herewith transmit to you estimates of the amount which will be required to meet the expenses of the public schools for the financial year commencing on the first day of May, 1891, and ending April 30, 1892, exclusive of the expenses for furniture, repairs, alterations, and the building of school-houses.

Very respectfully yours,

L. D. PACKARD,

Chairman Com. on Accounts, School Committee.

\$385,656

SALARIES OF INSTRUCTORS.

First Grade.

| 7 | Head-Masters | | | | at : | \$3,780 | \$26,460 | |
|----|----------------|---|-----|------|------|---------|-----------|-------------------|
| | Master . | | | | 66 | 3,168 | 3,168 | |
| | Masters . | | | | | 2,880 | 60,480 | |
| | Junior-Master | | | | 6.6 | 2,736 | 2,736 | |
| | Junior-Masters | | | | 4.4 | 2,448 | 7,344 | |
| | Junior-Master | | | | 4.6 | 2,304 | 2,304 | |
| | Junior-Masters | i | | | 66 | 2,160 | 8,640 | |
| | Junior-Master | | | · | 6.6 | 2,016 | 2,016 | |
| | Junior-Masters | i | | | 6.6 | 1,872 | 3,744 | |
| 4 | 66 | | | | 66 | 1,728 | 6,912 | |
| 3 | 66 | i | | | 6.6 | 1,584 | 4,752 | |
| 3 | 6.6 | | | i | 66 | 1,440 | 4,320 | |
| | Junior-Master | i | | | 66 | 1,296 | 1,296 | |
| 1 | " | · | | | 66 | 1,152 | 1,152 | |
| 1 | | · | | Ĭ | 6.6 | 1,008 | 1,008 | |
| Î | | · | · | · | | 2,000 | | \$ 136,332 |
| | | | Sec | cond | Grad | le. | | |
| 43 | Masters . | | | | at | \$2,880 | \$123,840 | |
| 3 | | | | | " | 2,820 | 8,460 | |
| 1 | Master . | | | | 6.6 | 2,760 | 2,760 | |
| 3 | Masters . | | | | | 2,700 | 8,100 | |
| 2 | | | | | 6.6 | 2,640 | 5,280 | |
| 2 | Sub-Masters | | | | 6.6 | 2,496 | 4,992 | |
| 1 | Sub-Master | | | | 6.6 | 2,316 | 2,316 | |
| 11 | Sub-Masters | | | | 6.6 | 2,280 | 25,080 | |
| 2 | " | | • | | 6.6 | 2,220 | 4,440 | |
| 2 | 4.6 | | | | 6.6 | 2,160 | 4,320 | |
| 2 | 4.6 | | | | " | 2,100 | 4,200 | |
| 3 | 44 | | | | 66 | 2,040 | 6,120 | |
| 4 | 66 | | | | 6.6 | 1,980 | 7,920 | |
| 2 | 66 | | | | 6.6 | 1,920 | 3,840 | |
| 1 | Sub-Master | | | | 66 | 1,896 | 1,896 | |
| 5 | Sub-Masters | | | | 6.6 | 1,800 | 9,000 | |
| 7 | 66 | | | | 6.6 | 1,740 | 12,180 | |
| 3 | " | | | | 6 6 | 1,680 | 5,040 | |
| 4 | | | | | " | 1,620 | 6,480 | |
| 1 | Sub-Master | | | | 6.6 | 1,560 | 1,560 | |
| 1 | 66 | | | | 66 | 1,500 | 1,500 | |
| | | | | | | | | 249,324 |

Carried forward,

| TI | rird | Grade. |
|----|------|--------|
| | | |

| | | | | 11 | ura | Graue | • | | |
|-------|------------|-----------|---|----|------|-------|---------|-----------|-----------|
| | Brought j | | | | | | | | \$385,656 |
| 1 A | ssistant I | Principal | | | | at : | \$1,800 | \$1,800 | |
| 3 Fi | irst Assis | stants | | • | | " | 1,620 | 4,860 | |
| 2 Se | econd As | sistants | | | | 66 | 1,380 | 2,760 | |
| 2 | | " | | | | 6.6 | 1,284 | 2,568 | |
| 20 A | ssistants | | | | | " | 1,380 | 27,600 | |
| 2 | | | | | | " | 1,332 | 2,664 | |
| 3 | 66 | | | | | " | 1,284 | 3,852 | |
| 1 A | ssistant . | | | | | " | 1,236 | 1,236 | |
| 3 A | ssistants | | | | | " | 1,188 | 3,564 | |
| 1 A | ssistant . | | | | | " | 1,092 | 1,092 | |
| 5 A | ssistants | | | | | " | 1,044 | 5,220 | |
| 4 | 4.6 | | | | | 66 | 996 | 3,984 | |
| 4 | " | | | | | " | 948 | 3,792 | |
| 5 | " | | | | | " | 900 | 4,500 | |
| 3 | " | | | | | " | 852 | 2,556 | |
| 2 | " | | | | | 66 | 804 | 1,608 | |
| 2 | " | | | | | " | 756 | 1,512 | |
| | | | | | | | | | 75,168 |
| | | | | Fo | urth | Grad | e. | | |
| 62 I | First Ass | istants | | | | | \$1,080 | \$66,960 | |
| 3 | 66 | 66 | | | | 66 | 1,044 | 3,132 | |
| 7 | " | 66 | | | | " | 1,008 | 7,056 | |
| 4 | 44 | " | | | | | 972 | 3,888 | |
| 3 | " | " | | | | 66 | 936 | 2,808 | |
| | Second A | ssistants | | | | | 816 | 80,784 | |
| 6 | " | 66 | | | | 6.6 | 804 | 4,824 | |
| 10 | 66 | " | | | | | 792 | 7,920 | |
| 10 | 66 | " | | | | | 780 | 7,800 | |
| 12 | 66 | | | | | 6.6 | 768 | 9,216 | |
| | Third As | sistants | | | | 6.6 | 744 | 221,712 | |
| 23 | " | " | | | | | 696 | 16,008 | |
| 22 | 66 | " | | | | 66 | 648 | 14,256 | |
| 24 | 66 | 4.6 | | | | 66 | 600 | 14,400 | |
| 20 | " | | i | | | | 552 | 11,040 | |
| 21 | " | 66 | • | | · | 66 | 504 | 10,584 | |
| 14 | 66 | | • | · | • | | 456 | 6,384 | |
| | Fourth A | ssistants | | | | | 744 | 219,480 | |
| 20 | 66 | 44 | | | | 4.6 | 696 | 13,920 | |
| 22 | 66 | | | | | ٠. | 648 | 14,256 | |
| | | | | | | | 0.10 | | |
| | Carried j | forward, | | | | | | \$736,428 | \$460,824 |
| | | | | | | | | | |

| Brought jorward. | \$736,428 | \$460,824 |
|--|-----------|-------------|
| 22 Fourth Assistants at \$600 | 13,200 | 4 200,021 |
| 21 | 11,592 | |
| 20 · · · · 504 | 10.080 | |
| 16 | 7.296 | |
| 15 Temporary Teachers, 100 days | 2.790 | |
| 15 Special Assistants, 100 days | 1,500 | |
| | | 782,886 |
| Special Grade. | | |
| School on Spectacle Island: — | | |
| Instructor | | 400 |
| Normal School: — | | |
| Special Instructor of Illustrative Drawing, etc. | \$1,080 | |
| " " Kindergarten Methods . | 1,080 | |
| | | 2,160 |
| Sewing: — | | |
| 29 Instructors, 242 Divisions | | 17,328 |
| High Schools: — | 2.00 | |
| Director of Modern Languages | \$3,000 | |
| 2 Assistants | 3,000 | 6,000 |
| Horace Mann School: — | | 0.00 |
| 1 Principal | \$2,508 | |
| 9 Assistants | 7,300 | |
| | | 9,808 |
| Musie:— | | |
| 1 Instructor, High Schools | \$2,640 | |
| 4 Instructors, Grammar and Primary Schools, | 10,560 | |
| | | 13,200 |
| Drawing Director | • • | 3,000 |
| Chemistry:— | | |
| Girls' High, 1 Instructor | \$1,620 | |
| " " 1 Laboratory Assistant | 504 | 2,424 |
| Director of Physical Training | | 3,000 |
| Physical Culture:— | | e, 000 |
| Girls' High, 1 Instructor | \$1,008 | |
| Girls' Latin, 1 " | 492 | |
| | | 1,500 |
| Military Drill: — | | |
| Instructor | \$2,000 | |
| Armorer | 800 | 2,800 |
| 0 | | |
| Carried jorward. | | \$1,305.330 |

| Brought forwe | ard, | | | | | | | \$1,305,330 |
|-------------------|-----------|-------|--------|------|------|-------|------------|--------------------|
| Manual Training | Schools | : — | | | | | | |
| Carpentry, 2 In: | structor | s | | | | | \$2,400 | |
| Cookery, 4 Inst | | | | | | \$744 | 2,976 | |
| " 4 | | | | | 66 | 456 | 1,824 | |
| | | | | | | | | 7,200 |
| Evening High Sch | | | | | | | | |
| Head-master, 22 | | | | | • | • | \$1,100 | |
| 2 Assistants, 60 | | | • | • | • | | 660 | |
| 26 " 22 | weeks | | | ٠ | | • | 11,440 | |
| Clerk | • | | • | | | • | 440 | 10.010 |
| Evening Elements | ary Scho | ools: | _ | | | | <u></u> | 13,640 |
| 10 Principals, 2 | 2 weeks | | | | | | \$5,500 | |
| 6 Principals, 2 | | | | | | | 2,640 | |
| 12 First Assistar | | | s . | | | | 3,300 | |
| 92 Assistants, 25 | | | | | | | 15,180 | |
| | | | | | | | | 26,620 |
| Evening Drawing | Schools | s:— | | | | | | |
| 2 Masters, 66 e | evenings | 3. | | | | | \$1,320 | |
| 5 Head Assista | nts, 66 | even | ings | | | | 1,980 | |
| 17 Assistants, 6 | 6 evenir | igs | | | | | 5,610 | |
| 5 Curators . | | | | | | | 660 | |
| | | | | | | | | 9,570 |
| Kindergartens: - | | | | | | | | |
| 18 Principals . | | | | | at | \$708 | \$12,744 | |
| 4 " . | | | | | 6.6 | 672 | 2,688 | |
| 5 " . | | | | | 6.6 | 636 | 3,180 | |
| 2 " . | | | | | 6.6 | 600 | 1,200 | |
| 6 Assistants . | | | | | 4.6 | 540 | 3,240 | |
| 10 " . | | | | | 6.6 | 504 | 5,040 | |
| 14 " . | | | | | 66 | 468 | 6,552 | |
| 3 | | | | | 6.6 | 432 | 1,296 | |
| 2 Special Assis | stants, 5 | 0 da | ys | | | | 100 | |
| | | | | | | | | 36,040 |
| Total for Inst | ruetors | | | | | | | \$1,398,400 |
| Total for this | iuciois | • | • | • | • | • | | \$1,000,400 |
| | s | ALAF | RIES (| OF O | FFIC | ERS. | | |
| Superintendent | | | | | | | | \$4,200 |
| - ~ | | | | | | | at \$3,780 | 22,680 |
| Secretary . | | | | | | | | 2,880 |
| Auditing Clerk . | | | | ٠ | | | | 2,880 |
| Carried forwa | ard, | | | | | | | \$32,640 |

| | 202 640 |
|--|-------------|
| Brought forward, | \$32,640 |
| Assistants in offices, School Department | . 4,440 |
| Copyist | . 1,000 |
| Messengers | . 1,820 |
| 17 Truant Officers | . 21,000 |
| Total for Officers | . \$60,900 |
| SALARIES OF JANITORS. | |
| Janitors of 10 High Schools | . \$11,200 |
| Janitor of Roxbury High School (7 mos. estimated) . | . 1,050 |
| Janitors of 55 Grammar Schools | . 48,300 |
| " " 98 Primary Schools | . 39,600 |
| " " 27 Special and Evening Schools | . 4,350 |
| " " School Committee Rooms | . 2,100 |
| | 2100.000 |
| Total for Janitors | . \$106,600 |
| FUEL, GAS, AND WATER. | |
| 12,000 Tons of Coal at \$5.40 (including weighing) . | . \$64,800 |
| 200 Cords of Wood, at \$12. | 2,400 |
| Gas | 6,200 |
| Water | 5,800 |
| | |
| Total | . \$79,200 |
| SUPPLIES AND INCIDENTALS. | |
| Text-books | |
| Reference-books \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | . \$43,500 |
| Exchange of books | |
| Books for Supplementary Reading | . 3,000 |
| Annual Festival | . 2,500 |
| Globes, Maps, and Charts | . 1,000 |
| Musical Expenses: — | |
| Instruments, Repairs and Covers | . 2,100 |
| Printing and Stock used for same, including reports of | of |
| School Committee meetings | 6,750 |
| Philosophical, Chemical, and Mathematical Apparatus an | d |
| Supplies | . 2,200 |
| School Census | . 1,400 |
| Stationery, Drawing Materials, and Record-Books . | . 13,200 |
| Slates, Diplomas, Racks, Pencils, Erasers, etc | 3,500 |
| Advertising | . 350 |
| Carried jorward, | \$79,500 |

| Brought forward, | | | | | | | \$79,500 |
|-------------------------------|----------|--------|------|-----|---------|------|-------------|
| Military Drill: — | | | | | | | |
| Arms, Repairs, etc | | | | | | | 1,050 |
| Removing snow, and fumigate | ting sel | 100l-l | ouse | s. | | | 1,200 |
| Janitors' and other supplies | | | | | | | 4,400 |
| Supplies for Manual Training | g Scho | ols | | | | | 3,000 |
| Materials for Kindergartens | | | | | | | 1,250 |
| Cost of work for delivering | | | | | | | |
| expenses of teaming, repair | | | | | | | 5,900 |
| Miscellaneous, including sew | | | | | | | |
| labor, horse and carriage ex | | | | | | | |
| tickets, receiving coal, extr | | | | | | | 3,200 |
| Total for Supplies and In | ncident | als | | | | | \$99,500 |
| RI | ECAPITI | ULAT | ION. | | | | - |
| Salaries of Instructors | | | • | | | | \$1,398,400 |
| Salaries of Officers | | | | | | | 60,900 |
| ~ | | | | | | | 106,600 |
| Fuel, Gas, and Water | | | | | | | 79,200 |
| | • | | | | | ٠. | 99,500 |
| | | | | | | | \$1,744,600 |
| | INCO | OME. | | | | | |
| Non-residents, State and City | | | | | | | \$13,500 |
| Trust Funds, and other source | | | | | | | 24,500 |
| Thou I time, and other source | | · | • | | | • | |
| | | | | | | | \$38,000 |
| The amounted the | Coboo | Con | | t £ | 0 12 th | . G. | anaial mann |

The amount granted the School Committee for the financial year 1890-91 was \$1,919,200.

This sum included \$235,000 for furniture, repairs, and the alterations of school-houses, which, at the request of the School Committee, were transferred, during the year, to the department, "School-houses, Public Buildings." This left \$1,684,200 at the disposal of the School Committee for the expenditures of the public schools.

The School Committee requested \$1,712,000, and the reduction made of \$27,800 limited the work in manual training during the year, and prevented the opening of Kindergartens in certain sections of the city where it is desirable to establish them.

The amount requested for the coming year 1891-92 is \$1,744,600, an increase of \$32,600 as compared with the estimates of 1890-91, and an increase of \$60,400 as compared with the amount granted.

The opening of the new Roxbury High School, the increase of pupils throughout the High Schools generally, the demand for additional Even-

ing Schools and Kindergartens, and the establishing of manual training on a proper basis, are the principal reasons for the increase requested.

In the opinion of the committees having charge of the preparation of these estimates, the amount requested for each item is needed, and should be granted if the children of our citizens are to have advantages equal to those afforded the children in many other cities.

The Committee on Accounts respectfully request that the Auditor of Accounts may be authorized to transfer unexpended balances from any one of the appropriations named to any other appropriation.

For the Committee on Accounts,

L. D. PACKARD,

Chairman.

For the Committee on Supplies,

R. D. ELLIOTT.

Chairman.

Under date of Feb. 10, 1891, the following additional estimates were transmitted:—

SCHOOL COMMITTEE, OFFICE OF ACCOUNTS, Feb. 10, 1891.

HON. NATHAN MATTHEWS, JR., Mayor: -

DEAR SIR,—The Committee on Accounts of the School Committee herewith transmit to you estimates of the amount which will be required to meet the expenses of the public schools, for the financial year commencing on the first day of May, 1891, and ending April 30, 1892, for furniture, repairs, and alterations of school-houses.

Very respectfully yours,

L. D. PACKARD,

Chairman Committee on Accounts, School Committee.

| Mason work, stock, pay | ing | and | drain | s | | | . 8 | \$33,000 | 00 |
|--------------------------|-------|--------|-------|---|---|--|-----|----------|----|
| Carpenter work and sto | ek . | | | | | | | 35,000 | 00 |
| New furniture and repa | irs o | of old | 1 | | | | | 36,000 | 00 |
| Heating-apparatus . | | | | | | | | 35,000 | 00 |
| Painting and glazing . | | | | | | | | 30,000 | 00 |
| Plumbing and gas-fittin | g . | | | | | | | 22,000 | 00 |
| Plastering and whitening | ıg . | | | | | | | 16,000 | 00 |
| Roofing, gutters, and co | ondu | ctors | | | | | | 14,000 | 00 |
| Iron and wire work . | | | | | | | | 6,000 | 00 |
| Salaries | | | | | | | | 8,000 | 00 |
| Blackboards | | | | | | | | 4,000 | 00 |
| Auxiliary fire-alarm, re | ent . | | | | | | | 3,200 | 00 |
| Rents and taxes | | | | | | | | 12,000 | 00 |
| Watering streets and ca | are o | f law | ns | | • | | | 4,000 | 00 |
| Carried forward, | | | | | | | 8 | 258,200 | 00 |

| Brought forward, | 3258,200 00 |
|---|--------------|
| Board and shoeing of two horses, and repairs of carriages | ĺ |
| and harnesses | 1,200 00 |
| Teaming | 1,200 00 |
| Total, ordinary repairs | \$260,600 00 |
| There will be required to comply with the requests of the | |
| | \$50,000 00 |
| For better egress in case of fires, per requests of the | \$00,000 00 |
| Inspector of Buildings | 50,000 00 |
| For Johnson's Valve Service, to regulate heat in school- | |
| houses | 5,000 00 |
| Addition to Lewis School-house for office, retiring-room, | |
| and store-room for books and stationery | 5,000 00 |
| For flag-poles on the different school-houses | 8,000 00 |
| Repairs on heating-apparatus, and regulator for Harvard | |
| Primary School, Charlestown | 1,000 00 |
| Total, extraordinary repairs | 8119,000 00 |
| Total amount, ordinary repairs | 260,600 00 |
| Total amount, extraordinary repairs | 119,000 00 |
| Total amount required, 1891–92 $\$$ | 379,600 00 |

These estimates have been carefully considered by the Superintendent of Public Buildings, who, by vote of the School Board, has entire charge of the repairs, alterations, and supplying of furniture for the various school-houses.

In accordance with the rules of the School Board, the Committee on Accounts, after conference with the Committee on Supplies, have prepared the estimates as herewith submitted, and respectfully request that the amount asked for be granted for the purposes herein mentioned.

For the Committee on Accounts.

L. D. PACKARD,

Chairman.

For the Committee on Supplies,

R. D. ELLIOTT, Chairman.

The City Council granted the School Committee for the expenses of the public schools for the nine months ending Jan. 31, 1892, the sum of \$1,500,000. This amount was granted under one appropriation, and included expenses for repairs and alteration of school-houses. The appropriation bill granting the School Committee the amount stated was signed by the Mayor April 30, 1891.

SCHOOL DOCUMENT NO. 11 - 1891.

ANNUAL REPORT

OF THE

COMMITTEE ON TEXT-BOOKS.

1891.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

In School Committee, Boston, May 12, 1891.

Ordered, That the Committee on Text-Books be authorized to report in print.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

The Committee on Text-Books, in accordance with the rules, present their annual report.

The revised courses of study for the Primary and Grammar Schools have been approved by the Board, and with the changes and improvements made comes the natural requirement of changes in text-books to carry out the purpose and intentions of the new courses.

The Board of Supervisors were requested to submit to this committee such recommendations as in the judgment of that Board were necessary. The discontinuance of the study of English History in the Grammar Schools, and the introduction of the study of Civil Government, and the extension of the study of United States History, have occasioned the need of changes in the text-books in these branches. The list of reference-books is also enlarged somewhat. The changes in Supplementary Reading-books are made with the intention of more properly supplementing the instruction in the schools.

In the High Schools the few changes submitted have been decided upon after mature deliberation, and are such, we trust, as will commend them to the favorable action of the Board.

In regard to Daniels' Latin Composition, referred to this committee, from the Board of last year, although the book might be found useful in some measure, yet there seems to be no pressing necessity for it, and as there are so many demands which, in our judgment, are necessary, the committee recommend that no further action be taken at the present time on this book.

Your committee have included in this report their recommendations in regard to the subject of reference-books in History, referred to them March 24. They recommend that six books be authorized as reference-books in the High Schools, for use in each class-room where History is taught.

Your committee have endeavored to perform their duty with a proper appreciation of the needs of the schools, and with due regard to the financial interests of the city.

The committee recommend the passage of the following orders.

For the Committee,

CHARLES M. GREEN,

Chairman.

Mr. Green dissents from the recommendations contained in Orders 3, 4, 5, 24, relating to text-books in Physiology.

- 1. Ordered, That the New Franklin Primer and First Reader be authorized for use as a text-book in the third class of the Primary Schools, in place of the Franklin Primer and Advanced First Reader.
- 2. Ordered, That Metcalf's Language Lessons be authorized for use as a text-book in the sixth class of the Grammar Schools (one set to be supplied for every two rooms of the fifth and sixth classes).
- 3. Ordered, That Blaisdell's Physiology for Little Folks be authorized for use as a text-book in the sixth class of the Grammar Schools.
- 4. Ordered, That Blaisdell's How to Keep Well be dropped from the list of text-books in the third and fourth classes of the Grammar Schools.
- 5. Ordered, That Stowell's A Healthy Body be authorized for use as a text-book in the fourth and fifth classes of the Grammar Schools.
 - 6. Ordered, That Smith's Elementary Physiology and

Hygiene be authorized for use as a text-book in the third class of the Grammar Schools.

- 7. Ordered, That Stone's History of England be dropped from the list of authorized text-books for Grammar Schools.
- 8. Ordered, That Higginson's History of the United States be discontinued as a text-book in the second class of the Grammar Schools.
- 9. Ordered, That Johnston's History of the United States and Montgomery's Leading Facts of American History be authorized for use as text-books in the first and second classes of the Grammar Schools.
- 10. Ordered, That Morey's Elements of Civil Government, Mass. edition, be authorized for use as a text-book in the first class of the Grammar Schools.
- 11. Ordered, That Masterpieces of American Literature (Houghton, Mifflin, & Co.) be authorized for use as a text-book in the first class of the Grammar Schools.
- 12. Ordered, That no more copies of Whitney's German Dictionary be purchased.
- 13. Ordered, That Heath's German Dictionary be authorized for use as a text-book in the Latin and High Schools.
- 14. Ordered, That Sheldon's German Grammar be authorized for use as a text-book in the Latin and High Schools.
- 15. Ordered, That the following-named books be authorized for use as text-books in French in the Latin and High Schools: Materials for French Composition (Grandgent); Abeille (A. France); Colomba (P. Merimée); Historiettes Modernes (edited by C. Fontaine).
- 16. Ordered, That Gage's Laboratory Manual of Physics be authorized for use as a text-book in the High Schools.
- 17. Ordered, That the following-named books be authorized for use as text-books in the High Schools: Williams's Chemistry; Williams's Laboratory Manual; White's outlines of Chemical Theory.

- 18. Ordered, That Shepard's Chemistry and A Record of Laboratory Work (D. C. Heath & Co.) be authorized for use as text-books in the High Schools.
- 19. Ordered, That Fiske's Civil Government be authorized for use as a text-book in the High Schools in place of Martin's Civil Government.
- 20. Ordered, That Allen & Greenough's Cæsar be authorized for use as a text-book in the Roxbury, West Roxbury, and Brighton High Schools.
- 21. Ordered, That the following-named books be authorized for use as reference-books in the Grammar Schools: Frye's Geography Teaching (one copy for the desk of each teacher of the fifth and sixth classes); Fables and Anecdotes and Stories for Teaching Composition (one copy for the desk of each teacher of the sixth class); Champlin's Young Folks' Cyclopædia of Persons and Places; Champlin's Young Folks' Cyclopædia of Common Things; MacCoun's Historical Geography of the United States; MacCoun's Historical Charts of the United States; Bulfinch's Age of Fable.
- 22. Ordered, That Reclus's Bird's-Eye View of the World be authorized for use as a reference-book in the Latin, High, and Grammar Schools.
- 23. Ordered, That Martin's Civil Government be dropped from the list of reference-books for Grammar Schools.
- 24. Ordered, That Blaisdell's Physiology for Little Folks be authorized for use as a reference-book in the Primary Schools (one copy for the desk of each teacher of the first class).
- 25. Ordered, That the following-named books be authorized as reference-books in the High Schools, for use in each class-room where history is taught: Sanderson's Epitome of the World's History; Labberton's Historical Atlas and General History; Tillinghast's Ploetz's Epitome of Ancient, Medieval, and Modern History; Adams's Manual of His-

torical Literature; Fisher's Outlines of Universal History; McCarthy's History of the World.

26. Ordered, That the following-named books be dropped from the list of authorized Supplementary Readingbooks:—

Grammar Schools. — Permanent Supplementary Reading. — Each and All, Class VI.: Stories of American History, Class V.: Robinson Crusoe; Holmes's and Longfellow's Leaflets, published by Houghton, Mifflin, & Co.; Book of Golden Deeds; Gilman's Historical Readers, 3 vols.; Tanglewood Tales; Wonder Book.

Circulating Supplementary Reading: Dab Kinzer; Book of Folk Stories.

Primary Schools. — Circulating Supplementary Reading. — McMillan's Second Reader; Lippincott's Second Reader. 27. Ordered, That the following-named books be added

to the list of authorized Supplementary Reading-books:

Latin and High Schools. — The Students' Series of English Classics (Leach, Shewell, & Sanborn); Bulfinch's Age of Chivalry; Bulfinch's Legends of Charlemagne. Latin. — Gradatim for Sight Reading (Ginn & Co.).

Grammar Schools. — Permanent Supplementary Reading. — Class VI.: Wood's Natural History Reader, No. 3 (thirty copies for a set); Stories of American History (sixty copies for a set). Class V.: Each and All (sixty copies for a set); Frye's Brooks and Brook Basins (thirty copies for a set); Wood's Natural History Reader, Nos. 4 and 5 (thirty copies for a set); American History Stories, Vol. IV., by Mara L. Pratt (thirty copies for a set). Class IV.: King's Geographical Reader, No. 2 (thirty copies for a set); Wood's Natural History Reader, No. 6 (thirty copies for a set); Eggleston's A First Book in American History (thirty copies for a set). Class I.: Geikie's Elements of Physical Geography (thirty copies for a set);

Philips's Historical Readers, Nos. 1, 2, 3, 4 (thirty copies, for a set).

Circulating Supplementary Reading: Tanglewood Tales; Wonder Book; Summer Holiday in Europe (Blake); Lost Jewel (Spofford); Hawthorne, American Classics for Schools (Houghton, Mifflin, & Co.).

Primary Schools. — Permanent Supplementary Reading. — Class I.: Scudder's Book of Fables.

Circulating Supplementary Reading: First Readers—Interstate Primer and First Reader; Davis's Beginner's Reading Book. Second Readers—Interstate Second Reader; Davis's Second Reading Book; Book of Folk Stories.

SCHOOL DOCUMENT NO. 12 — 1891.

ELEVENTH ANNUAL REPORT

OF THE

Superintendent of Hublic Schools

OF THE

CITY OF BOSTON.

MARCH, 1891.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.



REPORT.

To the School Committee:

The Superintendent of Public Schools respectfully submits his eleventh annual report.

STATISTICS.

The principal items to be found in the statistical tables appended to this report are here given side by side with the corresponding items from the statistics of former years, so that comparisons may be made easily.

The whole number of pupils belonging to all the day schools on the 31st day of January, each year:

| 1887. | 1888. | 1889. | 1890. | 1891. |
|--------|--------|--------|--------|--------|
| 58,432 | 58,471 | 61,100 | 60,502 | 60,994 |

The whole number of pupils belonging to each grade of day schools on the 31st day of January, each year:

| Normal S | school: | | | |
|-----------|-----------|--------|--------|--------|
| 98 | 122 | 170 | 178 | 176 |
| Latin and | l High Sc | hools: | | |
| 2,786 | 2,934 | 3,033 | 3,090 | 3,274 |
| Grammar | Schools: | | | |
| 30,592 | 30,795 | 31,407 | 31,347 | 31,504 |
| Primary : | Schools. | | | |
| 24,956 | 24,620 | 25,416 | 24,421 | 24,462 |

| 1887. | 1888. | 1889. | 1890. | 1891. |
|---------|---------|-------|-------|-------|
| Kinderg | artens: | | | |
| | | 1,074 | 1,466 | 1,778 |

The average number of pupils belonging to all the day schools during the five months ending January 31st, each year:

The average number of pupils belonging to each grade of day schools during the five months ending January 31st, each year:

| Normal | School: | | | | |
|------------------|------------|--------|--------|--------|--|
| 109 | 124 | 153 | 183 | 188 | |
| Latin an | d High Sc | hools: | | | |
| 2,835 | 2,975 | 3,082 | 3,213 | 3,322 | |
| Gramma | r Schools: | | | | |
| 30,689 | 30,840 | 31,448 | 31,777 | 31,675 | |
| Primary Schools: | | | | | |
| 24,540 | 24,284 | 24,467 | 23,832 | 24,035 | |
| Kinderg | artens: | | | | |
| | | 976 | 1,362 | 1,699 | |
| | | | | | |

The average number of pupils belonging to the special schools during the time such schools were in session to January 31st each year:

Horace Mann School for the Deaf:

| 75 | 72 | 76 | 89 | 85 |
|---------|----------|-------|-------|-------|
| Evening | High: | | | |
| 1,389 | 1,274 | 1,473 | 1,998 | 2,132 |
| Evening | Elementa | ry: | | |
| 2,034 | 2,085 | 2,330 | 2,968 | 3,243 |

| 1887. | 1888. | 1889. | 1890. | 1891. |
|-----------|-----------|-------|------------|-------|
| Evening | Drawing: | | | |
| 570 | 557 | 557 | 559 | 628 |
| Spectacle | e Island: | | | |
| 18 | 15 | 22 | $\dot{2}2$ | 15 |

PROMOTIONS.

After the usual tables in the Appendix is inserted a table (the last but one) showing the results of a special inquiry made last October for the purpose of learning how many children then in the schools had been in the same grade for a year or more. The form of questions was (1) how many children now, Oct. 10th, 1890, in each class? (2) how many of these were in any division of said class in October 1889? The answers disclosed the number of children in each class who had not been promoted from one class to another for a full year or more. It will be observed that the number of these non-promoted children is much larger in some districts than in others; also, that there are many more of them in the lower classes than in the upper. Taking the whole city together there were of non-promoted children in the first class grammar 60; in the second 342; in the third 500; in the fourth 518; in the fifth 747; in the sixth 734; in the ungraded 349; in the first class primary 277; in the second 765; and in the third 2,050. Why are there so many non-promoted children? Why so many who are required to spend a year and a half or two years in one grade? That there should always be some who from sickness or

other good reasons stay more than a year in a grade, is naturally to be expected. But cases of this kind would appear in all the schools about equally; while it is the great inequalities that provoke inquiry. Why so many non-promoted in one school; and in another, not dissimilarly circumstanced, so few? Has inefficient teaching anything to do with the matter? If so, the supervisors should regard the appearance of large bodies of non-promoted pupils as an indication that the teachers needed visitation. Or again, has the setting up of unreasonable standards anything to do with the matter? Why are boys and girls who are old enough to graduate from the grammar school and who with a little pains could be made to know enough, kept back in the second class? Why should they be compelled to stay another whole year in a grammar school because the first class room is not large enough to seat them; or because it is not convenient to have parts of the graduating class in two rooms; or because their scholarship is not up to a certain high standard required in some schools — but not in all — for admission to a "gilt-edged" graduating class? Why should so many of our boys and girls be required to spend seven or eight years on a course of study supposed to cover but six years? Is the course still too hard? Or is teaching skill inadequate? Or are the standards set for promotion unreasonably high? Or are children kept back for unsatisfactory conduct? or for deficiency in some one branch? or for the "good of the school"? Are the interests of the children sacrificed for the reputation of the school in

any way? These questions outline a field of inquiry that invites attention. I have touched upon this matter in former reports. My hope in again alluding to it is that the supervisors may be prompted to make thorough investigations and to report the facts.

PUPILS LEAVING SCHOOL BEFORE GRADUATION.

If one were to inquire how much is accomplished by the average grammar school of this city, he would look first into the course of study with its graded work covering six years; he would assume reasonably efficient teaching; but he would then need to know how many years the average boy or girl remained under this teaching and course of study. By reference to the statistical tables it will be seen that less than three eighths of those who enter our grammar schools finish the course and graduate. The other five eighths fall out before reaching the end. Again, the number of children in each year of age would be about six thousand, if there were no dropping out. From nine to twelve years of age, as the tables show, the children are all in school, there being reported about six thousand of each of those ages. After the age of twelve the falling out begins. thirteen-year-olds show a falling out of about five per cent; the fourteen-year-olds, twenty-five per cent; and the fifteen-year-olds, fifty per cent. Evidently, therefore, if the grammar school work is to reach the great mass of the children before they leave school, it must reach them before they are fourteen years old. And, further, if the whole grammar

school work is to reach the great mass of children, these children must be brought into the graduating class before they are fourteen years old. How far short of this our present practice comes, is well enough known in a general way. For more particular knowledge, however, reference may be made to the last table of statistics printed in the Appendix. These statistics were gathered recently from the school principals, who were requested to reply to the following interrogatories:

- (1) How many children being at the time of their discharge thirteen or more years of age were discharged from the schools of your district during the year between September 1, 1889 and September 1, 1890?
- (2) From this number deduct the number of those who were graduated in June 1890.
- (3) Deduct, further, the number of those who after leaving your school, certainly or probably entered some other day school.
- (4) The last remainder is the number of those who certainly or probably ended their day-schooling at the time of their leaving your school last year.
- (5) Of this last number how many belonged to the first class? second? third? fourth? fifth? sixth? ungraded? any primary class? How many were thirteen years old? fourteen? fifteen? sixteen or over?

Summarizing the answers we learn that 6,707 children being at the time of their leaving school thirteen or more years of age were discharged

between September 1, 1889 and September 1, 1890; that 2,305 of these were graduated in June 1890; that 1,345 certainly or probably entered some other day school; and that 3,057 certainly or probably ended their day-schooling when discharged. Of this last number, there belonged to the first class grammar 153; to the second class 600; to the third class 782; to the fourth class 748; to the fifth class 423; to the sixth class 149; to the ungraded class 192; and to the primary schools 10. Also of this last number, 865 were thirteen years old; 1,161 were fourteen; 691 were fifteen; and 340 were sixteen or older.

I have said that these children end their dayschooling at the time of their discharge; but some of them appear afterwards in the evening schools. It is their desire or that of their parents which leads them to seek further instruction; there is nothing in our school system which suggests or encourages such a step as a natural and proper one to take. No official cognizance is taken of their status when leaving the day schools; nor does the work of the evening schools relate itself to the day school work as a continuation or completion. But might not a way be opened from the day schools to the evening schools by which children leaving the former before finishing the course should pass easily and naturally into the latter, and continue the same course of work as if no break had been made? The great improvements that have already been made in the evening schools may prove that such a further improvement is not too much to expect.

The time should not be far distant when a large proportion of the 3,000 children who now drop out of the grammar schools before graduation, will continue and finish the same course of study in the evening schools. It is a matter well worth looking to.

THE COURSE OF STUDY.

A thorough revision of the course of study has been concluded during the past year, and some parts of the new course have already gone into operation. The course for the primary schools went into operation last September; that for the grammar schools will go into full effect next September, these schools meanwhile working on a course as nearly like the new one as is practicable. The course for the high schools is ready for final action; but is delayed in order that the course for the classical schools may be joined with it in the printing. The course for the normal school appears in the annual catalogue of that school. It has recently undergone a thorough revision, and is stated more in detail than formerly.

The present seems a fit time for calling attention to certain facts and considerations which may have a bearing on the matter of school administration under the new courses of study.

In the first place it will be well to remember that, although the course is called new, there is really but little that is new in it, either in matter or in form. It is the same old tree, pruned here and there to improve its shape or grafted a little by way of

experiment. It is, as every good course must be, a growth and not a manufacture. It has grown in our schools, gradually adapting itself to our needs and circumstances. The recent changes have been suggested partly by the teachers, and partly by the supervisors, as in their different ways they have learned by experience how the old course of study could be improved. The new course will remain essentially unchanged, we may hope, until accumulated experience shall again show wherein improvements are needed. A course of study eternally fixed would be a bad thing; for it would mean no advancement, no improvement, no recognition of new conditions and new educational needs. On the other hand, a course of study constantly under revision would be a bad thing for a large system of schools like our own; because thereby the perplexities of administration would be needlessly multiplied. It is desirable, therefore, that the present course may remain unchanged long enough for teachers and supervisors to learn by actual experience what its merits or defects really are; or what further changes, if any, may become necessary.

Now if the new course of study is to remain fixed for a few years, the next step for those who are concerned with administration — teachers, principals, supervisors, and superintendent — is to undertake seriously and earnestly the work of carrying this course, just as it now is, into full effect. Doubtless criticisms on this new course could be made — I know I could make some myself — but the time for that is not now, but later. Let criticism be

postponed until it can be given in the light of experience. Doubtless difficulties are going to arise out of the attempt to apply a fixed and uniform course of study to schools in diverse circumstances; but the effort should be to solve the difficulties otherwise than by departing from the established course of study. Difficulties of this sort are sometimes magnified or allowed to continue unremedied until they become available as excuses for failure to meet requirements; but they are apt to vanish before an earnest determination to carry out the whole course of study as laid down. There is probably good need, in Boston at the present time, of preaching the doctrine of a close adherence to the course of study. I am quite as ready as any one to subscribe to the declaration that schools do not exist for the purpose of carrying out courses of study, but courses of study are drawn up solely to aid schools in their work. There is, however, little need of insisting on this view just now. Our practice has been to play fast and loose with our courses of study in a fashion that is apt to astonish people from other parts of the country. "I have been visiting your schools many days, but I have nowhere seen any 'oral instruction,' although I find it laid down in the course of study; may I witness some oral instruction in your school?" So a visitor, some years ago, is said to have addressed the principal of a Boston school. And the reply is reported to have been, "No, you will not find much oral instruction in the schools; it looks well in the course of study and we allow the superintendent to keep it there for ornamental purposes chiefly; but few of us

pretend to do much with it." The anecdote may not be true, but it suggests a deal of truth. Of late years there has been a wide-spread effort among the teachers to bring the work of the schools more nearly into accord with the courses of study; particularly since the astounding discoveries recently made by an investigation of the teaching of arithmetic in our schools. There has been decidedly more care on the part of teachers to observe the authorized distribution of time, as well as an increased effort to teach the hitherto neglected branches. Still it would be difficult to find schools or teachers suffering from undue subservience to the course of study, and easy to find those suffering from the opposite cause. The present duty of each school principal seems clearly to be to make the work in his school agree closely with the requirements of the new course of study.

A second characteristic of this new course of study, transmitted from the former one, is its defining the work to be done in kind and not in amount—not such and such books or parts of books to be gone over, but such and such subjects to be studied for so many hours a week for so many weeks. The freedom of teaching thus secured to the teachers of Boston is, I fear, scarcely appreciated by them. In most large cities there is not only an outline course of study, which is all ours amounts to, but there is a voluminous manual as well. This manual makes definite what the course of study leaves undefined. The course of study states what is to be studied, the

manual tells how much; the course says nothing about methods, the manual is full of directions and suggestions as to methods; the course stimulates originality and independence in the teacher, the manual oppresses him with advice and authority. No manual has ever been imposed on the Boston schools. Suggestions as to the best methods of teaching particular branches have been issued from time to time by the Board of Supervisors; but these have been jealously deprived of any peremptory authority, lest freedom of teaching should be sacrificed. Teachers from other cities fail at first to understand such a state of things; and when at last they do understand it are astonished. "Please send me vour Manual" is a frequent request in the letters I receive from superintendents in other cities; and it seems as if I should never be done with explaining that Boston has never had such a thing, and gets along very well without it. If our teachers were tied to a manual as teachers are in some other cities, then indeed might they complain of loss of freedom or of burdensome prescriptions. A manual, however, is not altogether a bad thing. Probably the inferior teachers do better work with the manual than without one; but probably also the superior teachers are injuriously ham-We have preferred not to hamper our superior teachers, and to aid the inferior ones in other ways.

But perhaps the chief reason for prescribing lines of work, and not amounts, is the fact that the training of the mental powers rather than the storing of the mind with facts should be the main business of

the schools. To be sure, teachers are frequently asking their supervisors "how much," and are urging their classes forward under the impression that the more ground covered the better the supervisor ought to be pleased; but such habits of thought are passing away, and that other idea, that the teacher's main interest should centre in the kind and degree of power developed, rather than in the extent of ground gone over, is now becoming established. The examinations set by the supervisors have contributed to this end; for the questions, in the main, have aimed to test power rather than to measure stores of information. And it would be well if the present policy in this respect were well understood. Whatever theories may have prevailed in the past, we may all agree in adopting the view now that our course of study merely defines the kinds of work to be done and assigns a proportionate part of the school time to each kind; but does not explicitly state how much ground shall be covered in each kind of work, leaving that matter together with the whole matter of methods to the principal and teachers of each school. On these last mentioned matters the superintendent and the supervisors may give advice and offer suggestions, but they do not assume to dictate. Thus is the freedom of the teacher secured to the highest degree compatible with the efficient management of a large system of schools. Under such circumstances it should seem that the new course of study should find itself thoroughly established in all the schools before the end of another year.

As to the particular branches in the grammar and

primary courses, full consideration may be given to the language, the grammar, the geography, the history and the arithmetic in future reports; but in this report will be submitted remarks on the moral training, the physical training, the elementary science, the manual training, the drawing, and the music.

MORAL TRAINING.

Under this head no elaborate analysis of the ground to be gone over is attempted in the course of study; but a detailed schedule of the work might lead to a superficial and routine performance of it, which would be far less satisfactory than work done in immediate response to the current needs and occasions of each particular school. So it was thought better to give ourselves a general reminder of our duties by quoting the excellent provisions of the law on the subject from the Public Statutes of the State of Massachusetts. It would have been well too, perhaps, to quote from the Regulations of the Public Schools of Boston, Sections 180 and 181, particularly the former, which requires that "the morning exercises of all the schools shall begin with the reading in each classroom, by the teacher, of a portion of Scripture without note or comment." The effect of this exercise depends wholly on the spirit and manner in which it is performed; but performed aright and with a due regard to appropriateness and timeliness in the selections, this use of Scripture is probably the most impressive way of conveying moral instruction now open to the public school teacher. It is to be observed that this use of Scripture is not merely

permitted by our regulations, it is enjoined; although the use of all other religious exercises is prohibited. By forbidding all note or comment on the Scripture reading, the rule intends to cut off all occasions for treating of or alluding to sectarian subjects. To the teacher who can see clearly the line of demarcation between moral instruction on the one hand, and sectarian religious instruction on the other, the present state of affairs offers no serious difficulty. At any rate, the difficulties which may exist should not prevail upon any one to relinquish his efforts to impart to his pupils the best possible moral training. It is required of him by the laws of the Commonwealth and by the regulations of the School Committee.

Let it be observed, moreover, that the moral training which takes place in the schools is by no means limited to the half-hour a week set down in the course of study. It is only the opening exercises that are so limited. Besides these, there are special days set apart for literary or patriotic exercises, most of which have or may have a moral bearing. And then there are the constantly arising incidents of school life, affording the very best opportunities for moral instruction. Every experienced teacher knows that opportunities of this kind are of daily and even hourly occurrence, and that the moral tone of a school depends mainly on the use that is made of such opportunities as they arise. Indeed, in a very important sense, it is true that the whole work of the schools is moral training, and that moral training is not something apart from arithmetic and geography and history, but something that pervades the whole

work of the school, determining its whole character and tendency. Most of this training is indirect, to be sure; but it is for that reason none the less effective. Its quality is determined directly by the character of the teacher; and is more or less excellent according to the spirit which actuates him in his work. The most effectual moral training does not come by preaching. A teacher, for example, who allows dishonest work to be exhibited, and accepts therefor undue credit to himself or to his pupils, gives them a silent lesson which will effectually undo all his preaching about honesty as a virtue; but a teacher who is transparently honest in all things accurate in all small details because honesty requires accuracy — hardly needs to reinforce the power of his daily example by the words of preaching. Still the spoken word is by no means to be omitted. Preaching, so to express it, is a vital part of the school work. It is the set and formal instruction in morals and manners wherein the total influence of a school is brought to a focus and given definite expression. For this purpose the opening exercises are specially designed; particularly when the whole school is assembled in the school hall in the morning.

And just here let the inquiry be suggested whether we are at present making as full use of the school hall and its opportunities as we well might and ought. In some districts, it is observed, the whole school is assembled in the hall for opening exercises once a week, in others oftener and in others not so often. When we consider what a power for good can be exercised by the principal of

a school with all his teachers and pupils assembled together before him, we easily admit that only the most serious inconveniences should be allowed to prevent such meetings, and that they should regularly be held with the utmost frequency practicable. The ideal state of things would be when such meetings take place every morning. In other words, the purposes for which our school halls exist should be realized to the utmost, so that there may be no ground for the assertion sometimes made that school halls are expensive luxuries not justified by the uses actually made of them.

PHYSICAL TRAINING.

The new system of physical training known as the Ling System of School Gymnastics, has been enthusiastically received by the teachers; and under the care and guidance of the able director who has been chosen to oversee this work in the schools, many beneficial results may be expected. Indeed before the coming of a director encouraging results were obtained by the spontaneous action of many of the teachers. The director has already found the work going on well in nearly one-third of the schools.

The superiority of the new exercises to the old is apparent to the most uninitiated. But if mere observation be not convincing on this point, let one try the exercises for himself, both the old and the new, and judge by the effects wrought in his own case which kind will be the more beneficial to his pupils. There are many of our principals and teachers who have made just this sort of trial, and have

concluded that the Ling System is the best yet proposed for physical training in our public schools. And they have carried what they have learned right into their schools. So far as they have been instructed in the exercises they have in turn instructed their pupils. But they need more instruction, and desire to receive it. If their enthusiasm is to be kept burning there must be proper fuel. The instruction they give in their schools cannot go much beyond what they receive. For this reason the School Committee has acted wisely in providing special instruction for all teachers now in the service and for those soon to enter the service through the normal school. The burden on the normal school must be considerable for a time; because the pupils now entering it have had, for the most part, little or no training in the new exercises; but the burden will be less by and by, when the pupils come in thoroughly trained during their primary, grammar, and high school courses. The exercises themselves being familiar from long previous practice, more attention can be given to the underlying theory. Of course the time will never come when short intervals of physical exercise during the school session will cease to be beneficial to the teachers as well as to the pupils in the normal and in all other schools. The schools which just now most need renewed attention to this matter seem to be the high and Latin schools. The military drill, coming as it does for a whole hour twice a week, fails in one important particular to supply the needed physical exercise: it does not come frequently enough. Physical exercise should

be taken every day and two or three times a day in order effectually to counteract the ills of prolonged sedentary employment. The same remark applies to the calisthenics in the girls' high schools, if, like the military drill, the exercises come only twice a week.

There is one general remark which may properly be made here by way of precaution. It applies to all schools and teachers and to all other branches of school work as well as to physical training; but is suggested now because physical training happens to be uppermost in our thoughts. Whenever a new subject is introduced into the school curriculum or whenever there is a revival of interest in an old one, there is always a manifest strong desire on the part of teachers to show fine results, and that at an early day. This is a perfectly natural and legitimate desire. But under the stress of this desire, teachers are quite apt to spend upon the new subject more than a due share of effort and more than the authorized time. Or, if they resist this temptation and keep themselves strictly to the authorized time, they are distressed by a feeling that other teachers, less scrupulous in this particular, may surpass them in results. There is but one remedy for this state of things; and that is to insist that the prescribed distribution of time shall be observed strictly for all branches of the course. Results known to have been obtained by using an excess of time should be refused all consideration; they are illegitimate, and entitled to no credit whatsoever. Competition among schools and among teachers in the production of excellent results

is undoubtedly a wholesome stimulus; but competition becomes a great evil when it proceeds upon broken conditions or an unauthorized appropriation of time. Under existing circumstances in this city a close adherence to the prescribed course of study seems to be the duty which most needs to be preached and practised. And this duty is urged upon teachers by appeal to their honor; for upon their honor alone can any dependence be placed. No amount of supervision could compel the close observance of requirements which teachers did not feel in honor bound to observe.

These remarks about using an unauthorized excess of time for one branch of the course happen to apply just now to physical training, as above intimated; but at another time it may be drawing, at another singing, at another arithmetic or geography or penmanship. In another year we may be working under the stimulus of a desire to produce fine results for exhibition at a world's fair. Then this matter may assume a redoubled importance.

RECESS.

A word about the recess. The "no-recess plan" seems to have had its run; and the adoption of the new courses of study for the primary and grammar schools has made it certain that there is to be a recess. School is to begin at nine o'clock and end at twelve; and this morning session is not to be shortened by omitting the recess. The recess must be given for withdrawals from the room and for other purposes. If the old-fashioned play in the school-yard is not

allowed, the time must be given to physical exercise all the same. Let me urge the supreme importance of exercise in the fresh air out of doors. If the oldfashioned rough play is not allowed - and there are many large schools with small yards where it should not be allowed - then let there be Swedish gymnastics in the yard whenever the weather is fine. Five minutes of these gymnastics in the fresh air would be better than ten minutes of the same in the school-house. But when the weather is not favorable the gymnastics should be given in the school-rooms or in the corridors, preferably the latter, so that the rooms may be washed out with fresh air. As to the periods of time assigned to the gymnastics, the usual plan has been, and I suppose still is, to divide each session into two nearly equal parts by an interval of physical exercise. It would seem to be a still better arrangement to divide the morning session into three parts by two intervals of physical exercise, and the afternoon session into two parts, as now. This suggestion would apply, however, only when the exercises were taken in doors.

One word must be said here about "withdrawals from the room." There is no doubt about the annoyance to teachers caused by numerous requests to leave the room. There is no doubt either that these requests often become unnecessarily numerous when unchecked, particularly if children discover that the teacher can be annoyed in this way. Nevertheless teachers cannot be too careful; lest their apparent reluctance to grant requests deter the sensitive and timid children—those whose great

desire is to please their teacher — from making requests when they ought. These are the children who sometimes suffer serious physical injury, which the bolder children escape. A rule to stay after school whenever leave to withdraw from the room has been granted during the session may operate as a check upon frivolous requests; but it also operates on the sensitive conscientious child to deter him from incurring what to him looks like a penalty. Better some abuse of freedom in this particular than physical injury to a single child. There should be no rule which looks like exacting a penalty for a leave to withdraw from the room; for if the child is honest his request should be granted as a matter of course, and if dishonest he should be reached in some other way. Never should leave to withdraw from the room be regarded as a favor to be granted or denied at the teacher's pleasure; nor as a privilege to be won by good conduct or forfeited by bad conduct; but as a personal right not to be restricted except for the gravest reasons. Lest any might think the foregoing remarks uncalled for, let it be said, that complaints of undue strictness in the matter reach the office occasionally, from which the inference is clear that some ground still exists for urging on all teachers extreme caution. As usual in such cases, the greater number are in no need of admonition; they are only urged to counsel their less wise and experienced colaborers.

ELEMENTARY SCIENCE.

This branch has stood in our course of study some eight or nine years. It used to be called "oral instruction," because whatever instruction was given in natural history, physics, and such matters, was given orally. But the old name covered all kinds of talk the teacher chose to give; and it seemed to favor the idea that there was some special virtue in oral instruction not to be found in any other way. This idea has been carried so far in some cases that textbook instruction has been superseded by oral instruction in branches where the former method was the better of the two. Thus the old name proved to be misleading, and it was dropped. Its place in the primary schools was taken by "observation lessons," and in the grammar schools by "elementary science." These names have the merit of telling exactly what kind of work is expected. The first differs from "object lessons" merely in putting the emphasis on the child's activity in observing rather than on the presence of an object before him as the essential feature of the lessons. By choosing the name "observation lessons," attention is called to the fact that the chief thing to secure in such lessons is that the children really do observe with their own senses, and without being told what to see or feel. The oldfashioned "object lessons" were supposed to be all right if the teacher merely brought the object before the class and got the children to say in good sentences that they observed such and such qualities. There was no real observation in the proceeding.

The children usually said they saw what the teacher had indicated they should see; or they told again the "interesting" things the teacher had told them about the object; but for the purposes of pure observation exercised by the child himself the object might as well have been in the next town. Indeed, there are recorded instances of "object lessons" being given without the object anywhere within the range of observation. This, I admit, is an extreme distortion of a method of teaching — the object method — which is in itself sound and reasonable. The theory of this method is all right; but it is currently misunderstood; and it is to promote the correct understanding of it that the name "observation lessons" has been used in our course of study in place of "object lessons."

The name "elementary science" has been criticised by some who hold that no science can be elementary; that nature-study, like all other studies, has its elementary stage (facts) and its scientific stage (relations of facts); so that the phrase "elementary science" involves a confusion of ideas. Well, there is no claim to philosophical accuracy and consistency in the use of the terms employed in our course of study. If such a claim were to be made, it would be necessary, in the first place, to settle what system of philosophy or whose philosophical nomenclature we were going to use; otherwise we should launch ourselves into an interminable sea of controversy. Taken in the usual popular sense, the words "elementary science" convey an idea definitely and accurately enough for all practical purposes. When

we say that our grammar school work covers language, literature, geography, history, arithmetic, drawing, and science, there is no doubt that the word "science" covers those branches of nature-study which are usually considered appropriate for grammar schools; and when we prefix the word "elementary," we indicate that it is not the "advanced" stages of these studies that the grammar school undertakes. Elementary science is chiefly a gathering of facts by observation; but it does not exclude altogether comparison and generalization (relations of facts). Advanced science deals more with the relations of facts, but it gathers new facts through observation unremittingly. So much by way of answer to verbal criticism.

The important matter to which we all need to turn our thoughts is how shall the studies classed under "observation lessons" and "elementary science" be promoted in our schools. For it must needs be said that whatever may be the excellences of our schools in other respects, they are in respect to these naturestudies gravely deficient both in method and in The late Miss Crocker, after years of most painstaking and faithful labor to promote these studies, patiently instructing the willing teachers in the best methods and seeking to inspire the indifferent or unwilling with an interest in the matter - after all this, was unable to point out more than a very few teachers who were doing satisfactory work, while the majority were making no attempts whatsoever. There has been, so far as I can learn, but little improvement since. The normal school

has never influenced its pupils in a way to interest them much in natural science. The so-called "teachers' school of science" has given interesting instruction in natural science to the teachers who chose to attend; but little of that instruction has been directly helpful to these teachers in their schoolroom work. And so it remains a fact that the sciences — particularly the natural history sciences - have very little lodgement in our current school work, notwithstanding the appropriation of time made for them in the course of study for some years past. And this statement must be made more than a generation after the great Agassiz began his work of promoting an interest in the study of natural history among all people, all schools, and teachers!

There is one excuse for not teaching natural history in our schools, which may have some force in some districts of the city. It is alleged that the obtaining of a proper supply of material for natural history lessons is either quite impossible or so extremely difficult that teachers cannot reasonably be expected to supply themselves. In this view of the case doubts arise at the normal school as to whether the pupils there ought to be advised to attempt any natural history teaching when they come into the grammar and primary schools. The answer to such doubts is this: when teachers are once thoroughly interested in giving natural history instruction, these alleged difficulties to a great extent melt away. Not completely, however; and that is the reason why the matter needs consideration by the School Committee.

Let the difficulty be recognized for what it really is, and let a moderate sum of money be appropriated each year for the purpose of supplying the grammar and primary schools with suitable material for natural history lessons. For we cannot reasonably require of our teachers to make bricks without straw. On the other hand, it should not be forgotten that there is not a school room in the city to which some good material cannot be brought by a teacher who has any wish to lead her pupils in nature-study. A handful of peas, beans, wheat, corn, or other seeds is easily obtained. A few tubers or bulbs are not out of reach. Many teachers have quite extensive window gardens in their school rooms, containing interesting and beautiful growing plants. The help of children is easily enlisted to form a school museum. The variety and the value of specimens in zoology, mineralogy, and botany so collected often surprises those who have not tried it. If voluntary efforts of this kind should be encouraged and supplemented by the School Committee's action as above suggested, the natural history studies in our schools would soon rise out of their present state of inferiority.

MANUAL TRAINING.

For the first time in the history of our schools a definite share of time has been assigned to sewing and cooking, although the former has been recognized as a regular school exercise for many years. Both have been classed under the head "manual training," which has been given two hours a week. Aside from the sewing and cooking, however, which

have their recognized places in our current school work, the work in manual training is left undefined save by the mere mention of the branches light toolwork, clay modelling, and carpentry. These names' are chosen rather to cover what is actually going on in some schools by way of experiment than for the purpose of laying down a course of work. We are not ready yet to lay down in detail a course of manual training for grammar schools. Nowhere in this country, at least, has this been done with success. The man competent to do it has not yet appeared; nor will he appear until the body of experience gathered from many trials and some failures has grown large enough for him to correct his theories by practice. But this is no reason why we should further delay the introduction of branches of manual training here and there wherever we find teachers willing to experiment with it. For this purpose two hours a week have been set aside condemned to experiments if the conservatives desire so to phrase it - that we may the earlier and more surely learn what branches of manual training are worth keeping and what should be rejected as integral parts of the coming course of study. We would not have Boston wait until definite courses in manual training are in successful operation in many other cities before adopting one herself. That would be deliberately to assume a position in the rear of educational progress. If there is nothing worth adopting among all the proposed forms of manual training, the sooner we find it out the better, for then we can warn others against useless experiments.

If on the other hand some forms of manual training more than others are going to justify the claims of their advocates, the sooner we find this out the better; for then we may the earlier enjoy the advantages of the superior and avoid the evils of the inferior forms, and lead others to do the same. Thus in either case we must experiment if we would lead; we must "blaze the way," unless we are willing ignominiously to fall to the rear and let others lead us.

The course in manual training may, therefore, be understood to have been put forth with some such declaration as this: within the two hours a week assigned to this head, girls are to be taught sewing and cooking - and boys too if any desire it - and all other instruction called manual training which teachers may desire to experiment with shall be carried on; thus far and no farther may these experiments go; and these experiments shall remain always under the direct control of a special committee; which committee shall interfere at any time to stop a useless experiment or an undue waste of time; teachers are encouraged but not required to undertake promising experiments in this line; and if they choose not to do so they are at liberty to use the assigned time for other matters, provided some of it goes to physical training. Thus it appears that manual training has not yet been introduced into our grammar schools; but permission and encouragement and specified time have been given for its introduction, and the rest is left for the present, at least, to voluntary action. Out of the experiments thus

permitted and encouraged will come in the fulness of time, we may hope, a good working course in manual training, which can be stated in detail for all the classes in the grammar schools and with indications of the best methods to employ in the instruction. Frankly to declare that we are experimenting will disarm some conservative opposition; and promptly to abandon failures will show a determination to keep the alleged waste of time down to a minimum. It may here be suggested that the committee might well consider this year whether certain experiments should not be abandoned.

DRAWING.

The work under this title has now been stated in general terms, and is no longer indicated by references to a particular series of drawing books. A similar rule has been followed in all other parts of the course of study. The purpose of the rule is to subordinate text-books to the course of study and not to permit a control of the course of study by the text-books. Good progress has been made of late years in thus emancipating the course of study from the control of text-books in other branches; in drawing a no less successful emancipation may be looked for. The subject of drawing has this year been before the masters for consideration at several successive meetings, the director of drawing opening the discussion at the first and closing it at the last meeting. The meetings were the most fully attended and most interesting ever known in recent years. There is evidently a deep interest in the subject

among teachers; and there is a manifest desire to do better work than we are now doing; but just what needs to be done to enable them to do better work may not be so clear. The best suggestion that now occurs is that there should be instituted a thorough investigation for the purpose of learning the character of the work now going on; what schools are doing excellent or good work and what are doing inferior work; what teachers are competent and what partially or wholly incompetent, and why they are so. The revival of interest in drawing might be further promoted by holding an exhibition of drawing as used to be done some years ago. Some have suggested that we need more supervision in this branch than one director can give, particularly one who is forced to give the greater part of his time to the evening schools. This suggestion does not accord well with the theory adopted by the School Committee some years ago, when all the then special instructors in drawing were dropped and only one such official — the director — was retained. theory was that the whole instruction in drawing should be given by the regular teachers in all the schools, high as well as grammar and primary; that the teachers then in service were already sufficiently instructed, and those thereafter to enter through the normal school would there receive sufficient instruction; and that consequently further supervision in the drawing department for the purpose of instructing teachers was unnecessary. So the special instructors of drawing were all dropped and only a director was left. It is now alleged that results in

drawing are but poor, that the teachers need more special instruction, and that doing without special instructors was a mistake. Perhaps so, and perhaps not; that is the question that the investigation above suggested will determine. It may be remembered that a similar theory was urged upon the attention of the School Committee for several years in connection with the music. It was held that the regular teachers should teach all the singing in the primary and grammar schools at least; and that if the regular teachers were not all competent, the function of the special instructor was to make them so, which function being once discharged the special instructor would quietly drop out as no longer necessary. But in the case of music this theory has not found acceptance, though for what reason would be difficult to state. It would certainly seem that the two cases, one of drawing and the other of music, were nearly enough analogous to suggest similar treatment. The same theory can hardly be right in one case and wrong in the other. Either all the music should be put under one director without assistants, or the director of drawing should have special instructors to assist him. Can any good reason be assigned why the two cases should not be treated alike? I am not now seeking to prove that the theory in question is right or that it is wrong; I leave that to be determined by a thorough investigation of its fruits in drawing, and if practicable in music also; I am only seeking to show that the time has come for such an investigation, to the end that errors, if any there are, may be corrected.

MUSIC.

Under this title is inserted a brief statement that each special instructor of music will under the direction of the committee determine the topics, the order of topics, and the method of instruction, within his own circuit of schools. This statement may be taken as a confession of inability, on the part of those having a hand in the drafting of a new course of study, to draw up a course in music which, under existing circumstances, might be expected to prove acceptable and satisfactory to all. Such a confession will not surprise any one who is familiar with the history of music matters in our schools during the last ten years. There are rival methods of instruction in the field; and there are rival series of books embodying these methods. Which method to choose and which books to adopt have been open questions for some years. A few years ago a trial was instituted for the purpose of determining which method was superior; but a final conclusion on this point has never been reached. The merits of one method which had, up to the beginning of the trial, been excluded from the schools appeared to be such as to justify its introduction with its accompanying charts and books into the schools of one quarter of the city. The older method was represented in another quarter by its new and revised books, while the remaining half of the city was left with the old books of the older method. The trial was to proceed by a careful comparison of the results obtained in the two quarters of the city first mentioned. Had the

members of the Committee on Music, who instituted the trial, continued to have charge of the matter, it is possible that the question of the comparative merits of the two methods might ere now, have been settled. But changes in the membership of the committee have been many and rapid. None of those who began the trial remained long to watch its progress. The affair has drifted; results have not been collected or systematically scrutinized. Individuals may have formed opinions from what may have chanced to come under their observation; but there has been nothing in the nature of a scientific investigation of the whole body of facts, which is the only sound method for determining a question of this kind. Just now it appears likely that the question may be settled not by a scientific adjudication, but rather by a compromise of contending commercial interests. However this may be, it appears certain that a uniform and detailed course of study in music — one that shall be independent of textbooks and not subordinated to them — is not to be expected under present circumstances; - not until the whole matter of music in the schools shall be placed in sole charge of one director able to judge all methods impartially and to act independently.

THE EXAMINATION AND CERTIFICATION OF TEACHERS.

One chief function of superintendent and supervisors is to provide a supply of competent teachers for the schools. This is the function of the normal school too; but the normal school furnishes only a

portion of the supply, namely, that which comes from the city itself. There has always been and there always will be a portion of the supply coming from outside the city. This latter portion is in some respects the more important of the two. It happens sometimes that the policy of taking teachers from outside the city is discouraged, such a policy being supposed to make against the interests of the normal school or of its graduates; at other times the same policy is favored because of the pressing need to appoint experienced teachers rather than beginners in the more difficult places. So practice fluctuates, but within limits; for the necessity of employing some teachers from outside the city never wholly disappears, even in the primary and grammar schools. With the supply of male teachers for these schools and of all teachers for high schools, the normal school has little or nothing to do.

These facts indicate the great importance to the schools that the function of superintendent and supervisors in selecting teachers be discharged in the best possible manner.

And if any improvements in our present methods are possible they ought to be made. One such improvement was suggested in a former report, which I ask leave to recommend again. It is that candidates after their examination in scholarship and after returning to their schools be visited and reported on by two or more supervisors whenever the superintendent in his discretion may deem such visitation advantageous to the interests of the schools. The superintendent of the Boston schools probably knows less

about the merits of the candidates for teachers' places in his city than does the superintendent of any other city in New England. Principals of schools come to him in search of fit candidates for sub-masterships or for the more difficult places among those held by female assistants. He can name persons who have passed the scholarship examination; can tell how the examination was passed, whether with high marks or with low; can state wherein the candidate's scholarship is strong or is weak; can show a file of testimonials as to character, physical health, and aptness to teach; but his own opinion of the candidate's efficiency in the class room or in the management of a school is usually of no value whatever, because he has never seen the candidate teach nor observed him in the management of his school. Our present system of examination is excellent as far as it goes. Acting negatively it effectually bars out that sort of teaching talent which cannot pass examinations. It gives scholarship a chance to show itself, and personal character an opportunity to make an impression in one brief interview. But its positive action ought to be enlarged. It ought to investigate aptness to teach not merely through testimonials of personal friends, but also and chiefly by means of supervisors' visits. It ought not to rest content with testing the scholarship of those forced by ambition or by necessity to undergo the ordeal, but should reach out for able and experienced teachers everywhere and persuade them to take the examination by assuring them that their ability and skill will be thoroughly investigated and will weigh for much in the final decision. It should

load the superintendent with information about certificate holders; so that when appointments are to be made he may have some opinions worth considering touching the chief question, that of the candidates' ability in class teaching and in school management. If such opinions could be formed, as easily they could be with a supply of proper information, a deal of valuable time could be saved which is now wasted in fruitless or unnecessary visits. Let the visitation be done in a systematic way by the appointed experts the supervisors. Supplemented by such a provision for visitation, our system of examination and certification of teachers would be about perfect — certainly the best to be found in this country. If this matter could receive early consideration, so that any improvements that may be adopted could go into effect in connection with the next August examinations, the schools would begin almost immediately to reap the benefit.

A single remark may properly be added about persuading teachers to come to the August examinations. Principals of Boston schools, being on the lookout for the best candidates to fill prospective vacancies, have been known to suggest to promising candidates the desirableness of their presenting themselves at the next supervisors' examination. Some excellent teachers have been brought into the service in this way. The more this practice spreads among the principals the better. The plan is much better every way than to wait until an appointment must be made right away, and then begin to investigate for the first time the particular fitness of each

certificate holder for the vacant place. Such delay gives rise to more requests for "special examinations" than can wisely or safely be granted. There are two strong reasons why special examinations should not be held; one because they withdraw the supervisors from more important work; the other and far stronger reason because they are demoralizing. It is a most persistent though mistaken notion that a special examination is easier to pass than the regular examination; or that the supervisors will good naturedly accommodate their action in a special case to the exigencies of the moment, while in the regular examination they feel bound to follow general rules. How contrary to the principles of sound civil service such notions are needs no illustration.

Let the scope of the examinations be enlarged by including the plan of supervisors' visitations as above suggested, and the supposed need of special examinations will disappear.

CORPORAL PUNISHMENT.

A brief reference to this topic must be made to record the gratifying fact that the discipline of our schools is now carried on with far less use of the rod than it was two years ago. The figures reported for the past seven months compared with those of the corresponding period two years ago show that over three quarters of the corporal punishment has disappeared from the primary schools and almost a half from the grammar schools.

The change appears to me wholesome and beneficial every way — to teachers no less than to pupils;

and I most sincerely congratulate the teachers on their success in making such an improvement. I like well the spirit of one primary teacher who said recently that she had abandoned the use of the rod; there was not a rattan in her whole building; and that nothing would induce her or her fellow-teachers in that building to return to their former practice. Two years she defended that practice vigorously. There appear to have been many similar conversions; for the returns show many districts with no corporal punishment whatever in the primary schools and a good many more with an average of less than one case a month. I cherish the belief that many who read this report will live to see the rod utterly banished from our school discipline. And it will be banished as fast as teachers discover that they possess in themselves sources of influence far more potent than threats of castigation. An experienced observer among us has said that if teachers were conscious of the moral influence they really possess over their pupils, and had the confidence and the skill to use it aright, the appeal to the lower motives in school discipline would be far rarer than it now is. This was said two years ago. It would now seem that teachers have already come into a consciousness of their moral influence to an encouraging degree.

Respectfully submitted,

EDWIN P. SEAVER, Superintendent of Public Schools.



APPENDIX.

STATISTICS

FOR THE

HALF-YEAR ENDING JANUARY 31, 1891.

SUMMARY.

January, 1891.

| GENERAL SCHOOLS. | No. Schools. | No. of Teachers. | Average No. Pupils Belonging. | Average Attendance. | Average Absence. | Per cent. of Attendance. | No. at date. |
|------------------|--------------|---------------------|-------------------------------------|------------------------|---------------------|-----------------------------|--------------|
| Normal | 1 | 9 | 188 | 182 | 6 | 97. | 176 |
| Latin and High | 10 | 116 | 3,322 | 3,155 | 167 | 95. | 3,274 |
| Grammar | 55 | 731 | 31,675 | 29,088 | 2,587 | 91.8 | 31,504 |
| Primary | 466 | 466 | 24,035 | 21,086 | 2,949 | 87.7 | 24,462 |
| Kindergartens | 31 | 56 | 1,699 | 1,263 | 436 | 74.3 | 1,778 |
| Totals | 563 | 1,378 | 60,919 | 54,774 | 6,145 | 89.9 | 60,994 |

| SPECIAL SCHOOLS. | No. Schools. | No. of Teachers. | Average No. Pupils Belonging. | Average Attendance. | Average Absence. | Per cent. of Attendance. | No. at date. |
|------------------|--------------|---------------------|-------------------------------------|------------------------|---------------------|-----------------------------|--------------|
| Horace Mann | 1 | 10 | 85 | - 74 | 11 | 87 | 100 |
| Spectacle Island | 1 | 1 | 15 | 13 | 2 | 87 | 21 |
| Evening High | 1 | 33 | 2,132 | 1,411 | | | |
| Evening | 16 | 131 | 3,243 | 1,812 | | | |
| Evening Drawing | 5 | 24 | . 628 | 534 | | | |
| Totals | 24 | 199 | 6,103 | 3,844 | | | |

SCHOOLS AND TEACHERS.

| G | | TEACHERS. | |
|--------------------------|--------|-----------|--------|
| Schools. | Males. | Females. | Total. |
| Normal School | 2 | 5 | 7 |
| Latin School | 15 | | 15 |
| English High School | 25 | | 25 |
| Girls' High School | 2 | 20 | 22 |
| Girls' Latin School | 1 | 6 | 7 |
| Roxbury High School | 3 | 8 | 17 |
| Dorchester High School | 2 | 6 | 8 |
| Charlestown High School | 2 | 4 | 6 |
| West Roxbury High School | 1 | 3 | 4 |
| Brighton High School | 1 | 2 | 9 |
| East Boston High School | 2 | 3 | 5 |
| Grammar Schools | 104 | 582 | 689 |
| Primary Schools | | 466 | 466 |
| Kindergartens | | 56 | 56 |
| Totals | 160 | 1,161 | 1,324 |

SPECIAL TEACHERS.

| Y W C-hl | | | Total. |
|---|-----|-----|--------|
| Iorace Mann School | | 10 | 10 |
| Evening Schools | 74 | 90 | . 161 |
| Evening Drawing Schools | 19 | 5 | 24 |
| rench and German: High Schools | 3 | | 3 |
| Jusic: High, Grammar, and Primary Schools | 5 | | 5 |
| Illustrative Drawing: Normal School | | 1 | 1 |
| Xindergarten Methods: Normal School | | 1 | 1 |
| Orawing: High and Grammar Schools | 1 | | 1 |
| Physical Training | 1 | | 1 |
| ewing | | 29 | 29 |
| Chemistry: Girls' High School | | 1 | 1 |
| aboratory Assistant: Girls' High School | | 1 | 1 |
| ocal and Physical Culture: Girls' High School | | 1 | 1 |
| Vocal and Physical Culture: Girls' Latin School | | 1 | 1 |
| filitary Drill: High Schools | 1 | | 1 |
| Ianual Training Schools | 2 | | 2 |
| Cooking Schools | | 6 | 6 |
| pectacle Island | | 1 | 1 |
| Totals | 106 | 147 | 253 |

NORMAL AND HIGH SCHOOLS.

Semi-Annual Returns to Jan. 31, 1891.

| | | | | | | | | | _ | | | | | First Assistants. Second Assts. | | | | | |
|-------------------|-------|-----------------|--------|-------|------------------|--------|---------------------|----------------------------|---------------|----------------|-----------------|-------------------|-------------|---------------------------------|------------|--|--|--|--|
| Schools. | Ave | rage w Numbe | hole | | Averag tendar | | ce. | t. of lance. | asters. | | Junior-Masters. | Asst. Principals. | Assistants. | Assts. | its. | | | | |
| SCHOOLS. | Boys. | Girls. | Total. | Boys. | Girls. | Total. | Average Absence. | Per cent, of Attendance | Head-Masters. | Masters. | Junior- | Asst. Pr | First As | Second | Assistants | | | | |
| Normal | | 188 | 188 | | 182 | 182 | 6 | 97. | 1 | 1 | - | - | 1 | 6 | - | | | | |
| Latin | 451 | | 451 | 436 | | 436 | 15 | 96. | 1 | 9 | 5 | | ı. | J | | | | | |
| Girls' Latin | | 204 | 204 | | 194 | 194 | 10 | 95. | | 1 | | | | | 6 | | | | |
| English High | 799 | | 799 | 763 | | 763 | 36 | 95. | 1 | 8 | 16 | | ı. | | | | | | |
| Girls' High | | 720 | 720 | | 677 | 677 | 43 | 93. | 1 | 1 | | 1 | 1 | | 18 | | | | |
| Roxbury High | 148 | 251 | 399 | 143 | 238 | 381 | 18 | 96. | 1 | | 2 | | 1 | | 7 | | | | |
| Dorchester High | 100 | 136 | 236 | 93 | 126 | 219 | 17 | 92. | | 1 | 1 | | | | 6 | | | | |
| Charlestown High | 59 | 111 | 170 | 57 | 104 | 161 | 9 | 95. | 1 | L | 1 | ı | | | 4 | | | | |
| West Roxbury High | 31 | 71 | 102 | 30 | 66 | 96 | 6 | 95. | | 1 | | | | | 3 | | | | |
| Brighton High | 23 | 60 | 83 | 22 | 55 | 77 | 6 | 94. | | 1 | | | | | 2 | | | | |
| East Boston High | 69 | 89 | 158 | 66 | 85 | 151 | 7 | 96. | | 1 | | ı | | | 4 | | | | |
| Totals | 1,680 | 1,830 | 3,510 | 1,610 | 1,727 | 3,337 | 173 | 95. | 6 | $\frac{-}{24}$ | 25 | 1 | 3 | 6 | 50 | | | | |

NORMAL, LATIN, AND HIGH SCHOOLS, CLASSIFICATIONS AND AGES, JAN. 31, 1891.

| 21 years and over. | 52 | : | 67 | : | က | н | : | : | : | : | : | 58 | 1.7 |
|-----------------------|--------|-------|--------------|--------------|-------------|--------------|-----------------|------------------|-------------------|---------------|------------------|--------|-------------|
| 20 years. | 62 | 21 | က | | 14 | 9 | <u> </u> | 1 | <u>.</u> | : | : | 91 | 2.7 |
| 19 years. | 44 | 13 | 11 | 15 | 40 | 13 | 1- | 2 | 4 | : | 4 | 153 | 4.4 |
| 18 years. | 17 | 53 | 02 | 69 | 101 | 46 | 32 | 14 | 00 | 10 | 17 | 360 | 10.4 |
| 17 years. | н | 63 | 35 | 180 | 177 | 08 | 68 | 40 | 25 | 24 | 44 | 108 | 20.5 |
| 16 years. | | 103 | 40 | 217 | 160 | 114 | 73 | 51 | 56 | 56 | 49 | 859 | 24.9 |
| lo years. | | 68 | 47 | 207 | 129 | 65 | 22 | 43 | 24 | 20 | 31 | 139 | 21.4 |
| 14 years. | | 94 | 22 | 83 | 45 | 38 | 19 | 10 | 6 | က | 10 | 332 | 9.6 |
| 13 years. | | 09 | 14 | 6 | 6 | က | 4 | - | က | : | П | 104 | ကံ |
| 12 years. | | 30 | 1- | : | • | : | : | : | : | : | : | 37 | 11 |
| ll years. | : | 9 | က | | : | : | : | • | : | : | : | 6 | ಬೆ |
| Whole number at date. | 176 | 489 | 204 | 777 | 819 | 393 | 232 | 165 | 100 | 88 | 153 | 3,450 | 100 |
| Out.of-course class. | | 79 | 25 | • | : | : | : | : | : | : | : | 104 | က် |
| Sixth-year class. | : | 43 | 13 | • | : | : | : | • | • | • | : | 55 | 1.6 |
| Fifth-year class. | : | 53 | 35 | : | : | • | : | • | : | • | : | 88 | 2.6 |
| Fourth-year class. | | 11 | 27 | 58 | 47 | 34 | : | : | : | : | : | 240 | 6.9 |
| Third-year class. | 10 | 74 | 45 | 162 | 122 | 70 | 28 | 27 | 3.4 | 19 | 23 | 644 | 18.7 |
| Second-year class. | 101 | 88 | 28 | 266 | 158 | 110 | 11 | 47 | 27 | 27 | 53 | 971 | 28.0 |
| First-year class. | 65 | 81 | 31 | 321 | 324 | 179 | 103 | 91 | 39 | 37 | 11 | 1,348 | 39.1 |
| | : | : | : | : | : | : | : | : | • | : | : | | |
| Schools, | Normal | Latin | Girls' Latin | English High | Girls' High | Roxbury High | Dorchester High | Charlestown High | West Roxbury High | Brighton High | East Boston High | Totals | Percentages |

NORMAL AND HIGH SCHOOLS.

Number of Pupils to a Teacher, excluding Principals, Jan. 31, 1891.

| Schools. | No. of Reg. Teachers. | Average No. of Pupils. | Average No. of Pupils to a Regular Teacher. |
|-------------------|--------------------------|------------------------|--|
| Normal | 6 | 188 | 31.3 |
| Latin | 14 | 451 | 32.2 |
| Girls' Latin | 6 | 204 | 34.0 |
| English High | 24 | 799 | 33.3 |
| Girls' High | 21 | 720 | 34.3 |
| Roxbury High | 10 | 399 | 39.9 |
| Dorchester High | 7 | 236 | 33.7 |
| Charlestown High | 5 | 170 | 34.0 |
| West Roxbury High | 3 | 102 | 34.0 |
| Brighton High | 2 | 83 | 41.5 |
| East Boston High | 4 | 158 | 39 5 |
| Totals | 102 | 3,510 | 34.4 |

ADMISSIONS SEPTEMBER, 1890.

NORMAL SCHOOL.

| 0 | Number | Averag | ge Age. |
|---------------------------------------|-----------|----------|---------|
| Schools. | Admitted. | Years. | Months. |
| Girls' High School | 71 | 19 19 | 6 |
| Roxbury High SchoolFrom other sources | | 20 20 | 1 9 |
| Totals | 97 | 19 | 9 |

High School Graduates, Fourth-year class, June, 1890, Girls, 96.

LATIN AND HIGH SCHOOLS.

| Schools. | Adm | itted. | From Grammar | From other Sources. | Totals. | Average Ag | | | | |
|--------------------|-------|--------|-----------------|---------------------|---------|------------|------|--|--|--|
| | Boys. | Girls. | Schools. | Sources. | | Years. | Mos. | | | |
| Latin | 140 | | 107 | 33 | 140 | 14 | 2 | | | |
| Girls' Latin | | 55 | 38 | 17 | 55 | 14 | 7 | | | |
| English High | 414 | | 320 | 94 | 414 | 15 | 9 | | | |
| Girls' High | | 383 | 284 | 99 | 383 | 15 | 5 | | | |
| Roxbury High | 80 | 115 | 181 | 14 | 195 | 15 | 6 | | | |
| Dorchester High | 45 | 63 | 102 | 6 | 108 | 15 | 6 | | | |
| Charlestown High | 33 | 66 | 96 | 3 | 99 | 15 | 8 | | | |
| West Roxbury High, | 15 | 24 | 38 | 1 | 39 | 15 | 3 | | | |
| Brighton High | 12 | 27 | 37 | 2 | 39 | 15 | 7 | | | |
| East Boston High | 33 | 49 | 79 | 3 | 82 | 15 | 10 | | | |
| Totals | 772 | 782 | 1,282 | 272 | 1,554 | 14 | 5 | | | |

GRAMMAR SCHOOLS.

Semi-Annual Returns to Jan. 31, 1891.

| Schools. | | rage w Tumber | | | Averag tendar | | verage Absence. | Per cent. of Attendance. | .8 | Sub-Masters. | 1st Assistants. | Assistants. | Assistants. |
|----------------|-------|------------------|--------|-------|------------------|--------|--------------------|-----------------------------|----------|--------------|-----------------|-------------|-------------|
| | Boys. | Girls. | Total. | Boys. | Girls. | Total. | Average | Per ce | Masters. | W-qng | 1st As | | 3d Ase |
| Adams | 332 | 155 | 487 | 305 | 142 | 447 | 40 | 91. | 1 | 1 | 1 | 1 | 8 |
| Agassiz | 401 | | 401 | 377 | | 377 | 24 | 94. | 1 | 1 | 1 | 1 | 5 |
| Allston | 332 | 383 | 715 | 301 | 351 | 652 | 63 | 91. | 1 | 1 | 2 | 2 | 9 |
| Bennett | 256 | 279 | 535 | 245 | 266 | 511 | 24 | 96. | 1 | 1 | 1 | 1 | 7 |
| Bigelow | 735 | | 735 | 693 | | 693 | 42 | 94. | 1 | 2 | 1 | 1 | 10 |
| Bowditch | | 366 | 366 | | 337 | 337 | 29 | 92. | 1 | ı | 1 | 1 | 5 |
| Bowdoin | | 362 | 362 | | 315 | 315 | 47 | 87. | 1 | ŀ | 2 | 1 | 6 |
| Brimmer | 619 | | 619 | 561 | | 561 | 58 | 91. | 1 | 2 | 1 | 1 | 10 |
| Bunker Hill | 359 | 338 | 697 | 332 | 311 | 643 | 54 | 92. | 1 | 1 | 2 | 2 | 9 |
| Chapman | 314 | 288 | 602 | 294 | 265 | 559 | 43 | 92. | 1 | 1 | 2 | 2 | 7 |
| Charles Sumner | 316 | 294 | 610 | 291 | 271 | 562 | 48 | 92. | 1 | 1 | 2 | 1 | 8 |
| Comins | 274 | 270 | 544 | 256 | 246 | 502 | 42 | 92. | 1 | 1 | 2 | 1 | 6 |
| Dearborn | 375 | 287 | 662 | 344 | 261 | 605 | 57 | 92. | 1 | 1 | 2 | 2 | 8 |
| Dillaway | | 579 | 579 | | 523 | 523 | 56 | 91. | 1 | | 2 | 2 | 7 |
| Dudley | 617 | | 617 | 581 | | 581 | 36 | 94. | 1 | 2 | 1 | 1 | 10 |
| Dwight | 664 | | 664 | 616 | | 616 | 48 | 93. | 1 | 2 | 1 | 1 | 9 |
| Edward Everett | 311 | 274 | 585 | 288 | 249 | 537 | 48 | 92. | 1 | 1 | 1 | 1 | 7 |
| Eliot | 989 | | .989 | 868 | | 868 | 121 | 88. | 1 | 3 | 1 | 1 | 15 |
| Emerson | 438 | 307 | 745 | 404 | 284 | 688 | 57 | 92. | 1 | 2 | 2 | 2 | 10 |
| Everett | | 681 | 681 | | 623 | 623 | 58 | 92. | 1 | | 2 | 3 | 8 |
| Franklin | | 734 | 734 | | 664 | 664 | 70 | 90. | 1 | | 2 | 3 | 9 |
| Frothingham | 286 | 346 | 632 | 257 | 310 | 567 | 65 | 90. | 1 | 1 | 2 | 2 | 7 |
| Gaston | | 707 | 707 | | 649 | 649 | 58 | 92. | 1 | | 2 | 2 | 8 |
| George Putnam | 166 | 188 | 354 | 156 | 173 | 329 | 25 | 93. | 1 | | 1 | 1 | 5 |
| Gibson | 185 | 204 | 389 | 173 | 189 | 367 | 22 | 94. | 1 | 1 | 1 | 1 | 5 |
| Hancock | | 613 | 613 | | 544 | 544 | 69 | 89. | 1 | | 2 | 2 | 8 |
| Harris | 155 | 169 | 324 | 147 | 153 | 300 | 24 | 92. | 1 | | 1 | 1 | 5 |

STATISTICS.

GRAMMAR SCHOOLS. — Concluded.

| Schools. | Aver | age wl Iu m bei | nole | | Averag endand | | ge ence. | Attendance. | , pa | Sub-Masters. | Assistants. | Assistants. | Assistants. |
|-----------------|-------|---------------------------|--------|-------|------------------|----------|---------------------|-------------|----------|--------------|-------------|-------------|-------------|
| | Boys. | Girls. | Total. | Boys. | Girls. | Total. | Average Absence. | Per cent. | Masters. | Sub-M | 1st A88 | 2d Ass | 3d Ass |
| Harvard | 310 | 303 | 613 | 291 | 280 | 571 | 42 | 93. | 1 | 1 | 2 | 2 | 8 |
| Henry L. Pierce | 133 | 122 | 255 | 124 | 111 | 235 | 20 | 92. | | 1 | | 2 | 4 |
| Hugh O'Brien | 447 | 318 | 765 | 423 | 296 | 719 | 46 | 94. | 1 | 1 | 2 | 2 | 9 |
| Hyde | | 604 | 604 | | 552 | 552 | 52 | 91. | 1 | | 2 | 2 | 8 |
| John A. Andrew | 406 | 339 | 745 | 380 | 310 | 690 | 55 | 92. | 1 | 1 | 2 | 2 | 9 |
| Lawrence | 831 | | 831 | 785 | | 785 | 46 | 95. | 1 | 3 | 1 | 1 | 12 |
| Lewis | 347 | 359 | 706 | 325 | 332 | 657 | 49 | 92. | 1 | 1 | 2 | 2 | 7 |
| Lincoln | 555 | | 555 | 517 | | 517 | 38 | 93. | 1 | 1 | 1 | 1 | 8 |
| Lowell | 369 | 396 | 765 | 343 | 362 | 705 | 60 | 92. | 1 | 1 | 2 | 2 | 9 |
| Lyman | 437 | 183 | 620 | 400 | 169 | 569 | 51 | 92. | 1 | 1 | 2 | 2 | 8 |
| Martin | 171 | 185 | 356 | 160 | 169 | 329 | 27 | 92. | 1 | 1 | 1 | 2 | 6 |
| Mather | 290 | 283 | 573 | 268 | 256 | 524 | 49 | 91. | 1 | 1 | 1 | 1 | 8 |
| Minot | 144 | 169 | 313 | 136 | 155 | 291 | 22 | 93. | 1 | | 1 | 1 | 5 |
| Mt. Vernon | 105 | 124 | 229 | 100 | 114 | 214 | 15 | 93. | 1. | 1 | 1 | . 1 | 4 |
| Norcross | | 652 | 652 | | 589 | 589 | 63 | 90. | 1 | ı | 2 | 3 | 9 |
| Phillips | 803 | | 803 | 710 | | 710 | 93 | 88. | 1: | 1 2 | 2 1 | . 1 | 1: |
| Prescott | 261 | 270 | 531 | 244 | 247 | 491 | 40 | 92. | 1: | 1 | 1 1 | 1 | |
| Prince | 228 | 268 | 496 | 212 | 245 | 457 | 39 | 92. | 1 | 1 : | 1] | 1 | |
| Quincy | 554 | | 554 | 487 | | 487 | 67 | 88. | 1 | 1 ' | 2] | 1 | |
| Rice | 522 | | 522 | 48 | 5 | 485 | 37 | 93. | 1 | 1 : | 2 : | 6 | |
| Sherwin | 585 | | 585 | 544 | 1 | 544 | 41 | 93. | | 1 : | 2 : | 1 | |
| Shurtleff | | 658 | 658 | | 598 | 598 | 60 | 91. | 1 | 1 . | | 2 3 | |
| Stoughton | 213 | 214 | 427 | 199 | 9 194 | 393 | 34 | 92. | ١ | 1 | 1 | 1 1 | |
| Thomas N. Hart | 433 | 3 | 433 | 409 | 9 | 409 | 24 | 95. | 1 | 1 | 1 | 1 1 | |
| Tileston | 58 | 6 | 120 | 5. | 5 58 | 3 113 | | 7 94. | 1 | | 1 . | 1. | |
| Warren | 328 | 35- | 679 | 313 | 338 | 651 | . 2 | 8 96. | 1 | 1 | 1 | 2 2 | |
| Wells | | 52 | 5 525 | | 46 | 8 468 | 5 | 7 89. | 1 | 1 | | 2 1 | |
| Winthrop | | 81: | 2 815 | 2 | 718 | 715 | 9 | 7 88 | 1 | 1 | | 2 8 | 5 1 |
| Totals | 16,65 | 15,02 | 31,675 | 15,40 | 4 13,68 | 4 29,088 | 2,58 | 7 91 | .8 8 | 52 5 | 3 7 | 9 90 | 4: |

Number of Pupils in each Class, Whole Number, and Ages, Jan. 31, 1891. GRAMMAR SCHOOLS.

| | | , O. | п | ,0 | 1 | ע | 00 | ,, | 17.1. | Er | ` _ | _ | •• | • | 14 | • | | | | | | | | |
|-----------------------------|-------|-------------|------------|---------|---------|----------|---------|---------|-------------|---------|----------------|--------|----------|----------|--------|--------|----------------|-------|---------|---------|----------|-------------|--------|---------------|
| Eighteen years and over. | : | : | : | : | : | 67 | 2 | : | • | 67 | - | | : | : | : | г | : | • | : | : | 2 | : | 1 | es _ |
| Seventeen years. | 1 | 4 | 7 | 7 | 4 | 2 | 9 | CI | က | 5 | 4 | : | က | က | T | _ | 7 | 4 | 4 | 13 | 13 | : | 10 | ÇÌ |
| Sixteen years. | 15 | 16 | 21 | 15 | 13 | 6 | 13 | 13 | 17 | 36 | 16 | 7 | r- | 18 | 15 | 25 | 17 | 14 | 24 | 28 | 30 | 19 | 34 | ∞ |
| Fifteen years. | 38 | 38 | 48 | 53 | 32 | 49 | 33 | 48 | 49 | 22 | 42 | 27 | 42 | 52 | 55 | 55 | 44 | 45 | 20 | 99 | 89 | 31 | 89 | 25 |
| Fourteen years. | 8 | 89 | 95 | 83 | 87 | 51 | 48 | 84 | 66 | 82 | 55 | 7.4 | 85 | 64 | 94 | 104 | 16 | 153 | 95 | 86 | 118 | 16 | 68 | 52 |
| Thirteen years. | 99 | 22 | 112 | 16 | 125 | 28 | 99 | 109 | 111 | 86 | 102 | 113 | 131 | 103 | 115 | 116 | 98 | 198 | 132 | 105 | 125 | 112 | 105 | 75 |
| Twelve years. | 82 | 19 | 112 | 98 | 133 | 20 | 19 | 108 | 119 | 98 | 26 | 95 | 116 | 109 | 92 | 111 | 114 | 202 | 128 | 121 | 134 | 133 | 129 | - 55 |
| Eleven years. | 79 | 09 | 121 | 94 | 111 | 22 | 46 | 116 | 125 | 16 | 86 | 106 | 16 | 107 | 101 | 86 | 86 | 191 | 129 | 86 | 115 | 117 | 126 | 99 |
| Ten years. | 14 | 20 | 101 | 09 | 118 | 99 | 42 | 100 | 97 | 74 | 86 | 73 | 113 | 7.5 | 94 | 92 | 3 | 138 | 88 | 16 | 89 | 85 | 96 | 46 |
| Vine years. | 8 | 35 | 10 | .27 | 28 | 87 | 25 | 37 | 49 | 63 | 89 | 46 | 51 | 44 | 52 | 37 | 39 | 52 | 52 | 45 | 36 | 53 | 49 | - 02 |
| Eight years. | 14 | 2 | 35 | 6 | 21 | 2 | က | 2 | 11 | 14 | 24 | က | 13 | ∞ | Π | 22 | 11 | 20 | 15 | 13 | 6 | 67 | Ξ | -6 |
| Under eight years. | 1 | • | - <u>·</u> | • | • | • | • | : | : | - | - | • | 1 | : | : | • | : | 9 | • | П | ī | • | • | : |
| Whole number. | 408 | 412 | 722 | 525 | 722 | 365 | 354 | 622 | 089 | 607 | 909 | 544 | 629 | 280 | 009 | 662 | 989 | 993 | 737 | 685 | 721 | 625 | 202 | 353 |
| Ungraded Class. | 20 | : | | • | : | : | • | 37 | 30 | : | : | • | 28 | • | · 65 | 34 | : | 232 | 53 | 23 | : | 33 | : | 33 |
| Sixth Class. | 8 | 107 | 196 | 105 | 162 | 85 | 98 | 141 | 155 | 128 | 180 | 104 | 166 | 126 | 108 | 110 | 125 | 189 | 121 | 115 | 163 | 155 | 167 | 55 |
| Fifth Class. | 16 | 64 | 102 | 107 | 158 | 28 | 88 | 146 | 144 | 159 | 131 | 108 | 151 | 119 | 103 | 110 | 110 | 167 | 174 | 152 | 164 | 111 | 162 | 26 |
| Fourth Class. | 122 | 112 | 114 | 113 | 165 | 55 | 46 | 92 | 148 | 112 | 121 | 100 | 104 | 101 | 137 | 155 | 114 | 138 | 179 | 116 | 108 | 110 | 120 | - 49 |
| Third Class. | 182 | 22 | 116 | 901 | 103 | 22 | 99 | 68 | 96 | 66 | 81 | 94 | 92 | 101 | 93 | 100 | 112 | 110 | 118 | 101 | 102 | 105 | 110 | 22 |
| Second Class. | 46 | 40 | 16 | 48 | 68 | 26 | 37 | 84 | 69 | 28 | 48 | 95 | 11 | 85 | 80 | 86 | 18 | 107 | 47 | 101 | 110 | 69 | 96 | 99 |
| First Class. | 36 | 34 | 16 | 46 | 45 | 37 | 38 | 33 | 48 | 19 | 45 | 43 | 47 | 45 | 46 | 55 | 47 | 20 | 45 | 7.7 | 7.4 | 46 | 20 | 32 |
| Всноога. | Adams | Agassiz | Allston | Bennett | Bigelow | Bowditch | Bowdoin | Brimmer | Bunker Hill | Chapman | Charles Sumner | Comins | Dearborn | Dillaway | Dudley | Dwight | Edward Everett | Eliot | Emerson | Everett | Franklin | Frothingham | Gaston | George Putnam |

| - | _ | 67 | | : | : | : | 1 | | : | | | : | 1 | | | | : | 1 | : | က | : | 1 | - | : | : | • | | 2 | | 1 | 35 | r: |
|----------|---------|----------|---------|-----------------|--------------|-------|----------------|---------|-------|----------------|--------|-------|--------|--------|-------|------------|----------|----------|----------|---|--------|--------|---------|-----------|-----------|----------------|----------|--------|-------|----------|---------|------------|
| 72 | 67 | 4 | 61 | - | io | က | 22 | : | 6 | | : | 4 | : | : | : | က | | 7 | 1 | œ | က | ?7 | : | 4 | က | 1 | : | 00 | 1 | 7 | 186 | 9. |
| 111 | 13 | 00 | 13 | 10 | 31 | 24 | 10 | 4 | 53 | 6 | 2 | 20 | 14 | 16 | 4 | .11 | 10 | 16 | 15 | 21 | 9 | . 10 | . 17 | 17 | 10 | 13 | П | 25 | 10 | 22 | 855 | 2.7 |
| 33 | 34 | 32 | 52 | 31 | 52 | 46 | 53 | 28 | 62 | 30 | 42 | 42 | 33 | 25 | 22 | 17 | 23 | 37 | 39 | 45 | 27 | 36 | 62 | 69 | 33 | 28 | | 99 | 26 | 28 | 2,299 | 7.3 |
| 47 | 72 | 30 | 7.4 | eee | 126 | 85 | 79 | 68 | 88 | 89 | 95 | 88 | 20 | 20 | 45 | 30 | 0.7 | 100 | 14 | 73 | 55 | 11 | 75 | 81 | 62 | 69 | 17 | 19 | 09 | 66 | 4,207 | 13.4 |
| 1.9 | 101 | 09 | 111 | 45 | 127 | 116 | 157 | 143 | 96 | 111 | 123 | 108 | 69 | 102 | 46 | 40 | 121 | 145 | 112 | 15 | 127 | 163 | 91 | 119 | 11 | 74 | 23 | 108 | 91 | 159 | 5,552 | 17.6 |
| 63 | 120 | 99 | 126 | 43 | 164 | 101 | 148 | 185 | 106 | 113 | 151 | 115 | 44 | 103 | 69 | 47 | 133 | 154 | 16 | 105 | 114 | 95 | 100 | 107 | 64 | 89 | 18 | 131 | 124 | 156 | 5,769 | 18.3 |
| 59 | 102 | 55 | 108 | 44 | 86 | 102 | 114 | 167 | 112 | 106 | 135 | 101 | 46 | 115 | 46 | . 36 | 114 | 137 | 85 | 65 | 96 | 83 | 101 | 102 | 75 | 99 | 21 | 66 | 104 | 134 | 5,240 | 16.6 |
| 64 | 111 | 35 | 91 | 24 | 104 | 79 | 116 | 125 | 122 | 98 | 126 | 73 | 40 | 80 | 43 | 21 | 103 | 117 | 79 | 62 | 81 | 7.5 | 83 | 06 | 7.4 | 70 | 21 | 100 | 63 | 117 | 4,420 | 14. |
| 38 | 53 | 18 | 31 | 6 | 20 | 36 | 99 | 53 | 65 | 21 | 91 | 97 | 26 | 55 | 31 | 18 | 51 | 55 | 38 | 42 | 39 | 47 | 46 | 51 | 32 | 34 | 16 | 96 | 34 | 54 | 2,346 | 7.5 |
| <u>∞</u> | 17 | 61 | 10 | _ | 11 | 10 | 14 | 21 | 14 | 00 | 16 | 9 | 10 | 5 | 13 | 5 | - | 15 | 00 | ======================================= | က | 9 | 9 | 14 | 12 | 00 | 22 | 11 | 10 | 00 | 575 | 1.8 |
| 1 | က | : | • | : | : | : | : | ç1 | • | : | : | : | 1 | _ | • | • | • | : | : | • | : | : | • | • | • | • | | • | | : | 20 | F |
| 394 | 629 | 302 | 819 | 241 | 168 | 809 | 160 | 817 | 104 | 553 | 692 | 603 | 354 | 572 | 300 | 728 | 633 | 184 | 545 | 510 | 551 | 523 | 588 | 654 | 436 | 431 | 121 | 889 | 523 | 815 | 31,504 | 100 |
| : | 169 | : | 27 | : | : | 35 | 31 | 28 | 55 | 33 | : | 33 | : | : | : | • | • | 89 | • | • | 42 | 30 | 37 | : | • | • | • | 34 | 06 | : | 1,301 | 4.1 |
| 16 | 111 | 51 | 135 | # | 230 | 157 | 156 | 175 | 117 | 121 | 186 | 118 | 65 | 161 | 8.4 | 50 | 1.59 | 173 | 120 | 93 | 175 | 106 | 110 | 151 | 06 | 91 | 24 | 168 | 103 | 205 | 6,946 | 22. |
| 84 | 106 | 17 | 142 | 39 | 139 | 102 | 165 | 146 | 122 | 66 | 175 | 136 | 46 | 111 | 69 | 36 | 170 | 165 | 145 | 102 | 109 | 109 | 191 | 211 | 11 | 75 | 26 | 159 | 93 | 500 | 6,539 | 8.02 |
| 80 | 113 | 25 | 105 | 44 | 143 | 96 | 158. | 162 | 113 | 114 | 150 | 109 | 69 | 105 | 20 | 47 | 130 | 167 | 76 | 95 | 100 | 06 | 105 | 91 | 87 | 66 | 14 | 115 | 66 | 149 | 5,837 | 18.5 |
| 51 | 20 | 53 | 103 | 33 | 86 | 66 | 156 | 106 | 113 | 98 | 108 | 26 | 42 | 100 | 44 | 32 | 86 | 98 | 7.7 | 93 | 53 | 85 | 06 | 95 | 63 | 84 | 24 | 108 | 48 | 102 | 1,711 | 15. |
| 40 | 40 | 35 | 55 | # | 59 | 88 | 22 | 96 | 104 | 1 9 | 97 | 54 | 80 | 51 | 32 | 34 | 45 | 62 | 62 | 8.5 | 36 | 22 | 51 | 52 | 02 | 49 | 19 | 09 | 51 | 92 | 3,587 | 11.4 |
| 45 | 40 | 37 | 51 | 34 | 66 | 34 | 37 | 74 | 80 | 36 | 53 | 99 | 52 | 44 | 30 | 53 | 31 | 97 | 47 | 48 | 36 | - 6F | 34 | 29 | 49 | 33 | 14 | 41 | 39 | 58 | 2,583 3 | 8.2 |
| : | : | : | : | : | • | : | • | : | : | • | • | • | • | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | | | |
| : | | : | : | ierce . | en · · | : | drew. | : | : | : | : | : | : | : | : | : | 0 | | : | : | : | : | : | : | : | Hart . | : | : | : | | | ts |
| on. | ock . | is | ard . | Henry L. Pierce | Hugh O'Brien | | John A. Andrew | awrence | | · ulc | ell. | an. | in. | er. | ٠ . | Mt. Vernon | ross . | · sdi | cott . | əs | cy | | win. | tleff. | Stoughton | Thomas N. Hart | ton . | ren . | | Winthrop | Totals | Per cents. |
| Gibson | Hancock | Harris . | Harvard | Henr | Hugl | IIyde | John | Lawı | Lewis | Lincoln | Lowell | Lyman | Martin | Mather | Minot | Mt. | Norcross | Phillips | Prescott | Prince | Quincy | Rice . | Sherwin | Shurtleff | Stou | Thor | Tileston | Warren | Wells | Win | E-1 | |

DISTRIBUTION OF PUPILS IN RESPECT BOTH

| | | 1 | 1 | | i | | | |
|-------------------|------------------------------------|------------|----------------------|----------------|----------|---------------|----------------|--------------|
| | CLASSES. | | Under 5 years. | | 6 years. | years. | years. | 9 years. |
| Latin Schools. | All Classes { | Boys Girls | | | | | | |
| Z. S. | Totals | | | | | | | |
| | Advanced Class { | Boys Girls | | | | | | |
| nools. | Third-year Class { | Boys Girls | | | | | | |
| High Schools. | Second-year Class . { | Boys Girls | | | | | | |
| Ħ | First-year Class { | Boys Girls | : : | | | | | :: |
| | Totals | | | | • • | | | |
| | First Class { | Boys Girls | | | | | | |
| | Second Class { | Boys Girls | | | :: | | | • |
| ools. | Third Class | Boys Girls | | | :: | | : : | 1 |
| r Scho | Fourth Class { | Boys Girls | :: | • • | | :: | | 21 13 |
| Grammar Schools. | Fifth Class { | Boys Girls | :: | | :: | | 11 12 | 243 211 |
| Gr | Sixth Class | Boys Girls | | | | 5 | 260 242 | 886 828 |
| | Ungraded Class { | Boys Girls | | | | 8 3 | 35 15 | 103 40 |
| | Totals | | | | | 20 | 575 | 2,346 |
| ols. | First Class { | Boys Girls | | | 6 2 | 239 241 | 949 947 | 1,087 987 |
| Schools. | Second Class | Boys Girls | | | | 1,401 $1,237$ | 1,301 1,132 | 676 499 |
| Primary | Third Class \ldots $\left\{ ig $ | Boys Girls | | 1,408 1,230 | | | 495 454 | 165 165 |
| Pr | Totals · | | 28 | 2,653 | 4,883 | 5,569 | 5,278 | 3,579 |
| - | Grand totals | | 28 | 2,653 | 4,883 | 5,589 | 5,853 | 5,925 |

TO AGE AND TO CLASSES, JANUARY 31, 1891.

| 10 years. | 11 years. | 12 years. | 13 years. | 14 years. | 15 years. | 16 years. | 17 years. | 18 years. | years and over. | Totals. |
|--------------|--------------|--------------|--------------|---|--------------|--------------|--------------|--------------|-----------------------|----------------|
| | 6 | 30 7 | 60 14 | $\begin{array}{c} 94 \\ 22 \end{array}$ | 89 47 | 103 40 | 63 | 29 20 | 15 16 | 489 204 |
| • • | 9 | 37 | 74 | 116 | 136 | 143 | 98 | 49 | 31 | 693 |
| | | | :: | :: | :: | 3 3 | 11 23 | 12 39 | 6 39 | 32 104 |
| | | | | : : | 14 5 | 73 47 | 95 97 | 60 79 | 9 37 | 251 265 |
| | : : | | | 19 7 | 94 69 | 146 110 | 107 119 | 21 49 | 2 16 | 389 370 |
| | : : | : : | 18 12 | 109 81 | 217 205 | 120 214 | 54 103 | 5 29 | | 523 648 |
| | | | 30 | 216 | 604 | 716 | 609 | 294 | 113 | 2,582 |
| | | 19 5 | 168 142 | 399 394 | 390 458 | | | | | 1,235 1,348 |
| 2 | 23 13 | 216 140 | 526 465 | 612 565 | 347 394 | 92 148 | | | | 1,827 1,760 |
| 29 15 | 192 157 | 576 558 | . 804 752 | 538 521 | 206 241 | | | | | 2,403 2,308 |
| 244 199 | 721 636 | 968 793 | 762 622 | 357 286 | 81 92 | | | | | 3,169 2,668 |
| 828 747 | 922 891 | 744 731 | 406 396 | | 17 31 | | | | | 3,358 3,181 |
| 1,103 959 | 744 670 | 408 361 | 183 165 | 63 | | | 2 | | | 3,671 3,275 |
| 200 94 | 188 82 | | 126 35 | 69 27 | 16 | | 1 | | | 897 404 |
| 4,420 | 5,240 | 5,769 | 5,552 | 4,207 | 2,299 | 855 | 186 | 35 | 5 | 31,504 |
| 579 547 | 190 200 | 73 74 | 31 28 | | | :: | :: | | .: | 3,154 3,026 |
| 203 217 | 64 50 | 19 31 | 6 | | : : | :: | | | | 4,160 3,639 |
| 49 57 | | | 1 6 | :: | :: | :: | . ': | | | 5,541 4,942 |
| 1,652 | 534 | 208 | 78 | | | | | | | 24,462 |
| 6,072 | 5,783 | 6,014 | 5,734 | 4,539 | 3,039 | 1,714 | 898 | 378 | 144 | 59,241 |

PRIMARY SCHOOLS.

Semi-Annual Returns; to Jan. 31, 1891.

| Districts. | ers. | | rage w Number | | At | Average Absence. | ar cent. of Attendance. | Between 5 and 8 years. | Over 8 years. | Whole No. at date. | | |
|----------------|-----------|-------|------------------|--------|--------------------|---------------------|-------------------------|------------------------|---------------------------|--------------------|--------|-------------|
| | Teachers. | Boys. | Girls. | Total. | al. Boys. Girls. T | | Total. | Avera | Per cent. of Attendanc | Betwe 8 year | Over 8 | Whole date. |
| Adams | 6 | 180 | 132 | 312 | 162 | 115 | 277 | 35 | 89. | 157 | 156 | 313 |
| Agassiz | 3 | 109 | 74 | 183 | 98 | 65 | 163 | 20 | 89. | 109 | 85 | 194 |
| Allston | 10 | 256 | 266 | 522 | 236 | 240 | 476 | 46 | 91. | 287 | 256 | 543 |
| Bennett | 7 | 176 | 157 | 333 | 164 | 144 | 308 | 25 | 93. | 178 | 169 | 347 |
| Bigelow | 12 | 379 | 280 | 659 | 335 | 242 | 577 | 82 | 88. | 391 | 284 | 675 |
| Bowditch | 6 | 145 | 126 | 271 | 126 | 110 | 236 | 35 | 87. | 166 | 123 | 289 |
| Bowdoin | 8 | 146 | 164 | 310 | 133 | 143 | 276 | 34 | 89. | 158 | 167 | 325 |
| Brimmer | 8 | 203 | 158 | 361 | 182 | 140 | 322 | 39 | 89. | 230 | 166 | 396 |
| Bunker Hill | 12 | 273 | 269 | 542 | 244 | 236 | 480 | 62 | 89. | 264 | 278 | 542 |
| Chapman | 6 | 174 | 140 | 314 | 154 | 124 | 278 | 36 | 88. | 181 | 136 | 317 |
| Charles Sumner | 9 | 228 | 214 | 442 | 199 | 185 | 384 | 58 | 87. | 271 | 176 | 447 |
| Comins | 7 | 151 | 133 | 284 | 136 | 114 | 250 | 34 | 88. | 170 | 123 | 293 |
| Dearborn | 13 | 334 | 289 | 623 | 291 | 238 | 529 | 94 | 86. | 304 | 320 | 624 |
| Dillaway | 7 | 184 | 161 | 345 | 151 | 133 | 284 | 61 | 82. | 185 | 173 | 358 |
| Dudley | 13 | 307 | 322 | 629 | 278 | 273 | 551 | 78 | 86. | 320 | 337 | 657 |
| Dwight | 10 | 216 | 258 | 474 | 195 | 227 | 422 | 52 | 89. | 277 | 203 | 480 |
| Edward Everett | 8 | 217 | 210 | 427 | 190 | 182 | 372 | 55 | 87. | 240 | 198 | 438 |
| Eliot | 8 | 309 | 161 | 470 | 261 | 130 | 391 | 79 | 83. | 255 | 207 | 462 |
| Emerson | 10 | 295 | 274 | 569 | 263 | 247 | 510 | 59 | 89. | 289 | 275 | 564 |
| Everett | 10 | 262 | 259 | 521 | 223 | 219 | 442 | 79 | 85. | 278 | 256 | 534 |
| Franklin | 12 | 305 | 288 | 593 | 275 | 252 | 527 | 66 | 88. | 305 | 310 | 615 |
| Frothingham | 9 | 251 | 252 | 503 | 231 | 221 | 452 | 51 | 90. | 258 | 242 | 500 |
| Gaston | .9 | 176 | 294 | 470 | 163 | 259 | 422 | 48 | 90. | 273 | 196 | 469 |
| George Putnam | 4 | 119 | 104 | 223 | 104 | 90 | 194 | 29 | 87. | 122 | 100 | 222 |
| Gibson | 6 | 147 | 142 | 289 | 131 | 124 | 255 | 34 | 88. | 189 | 136 | 328 |
| Hancock | 13 | 436 | 472 | 908 | 377 | 401 | 778 | 130 | 86. | 509 | 421 | 930 |
| Harris | 5 | 149 | 147 | 296 | 130 | 126 | 256 | 40 | 86. | 137 | 150 | 287 |
| Harvard | 12 | 314 | 303 | 617 | 284 | 268 | 552 | 65 | 89. | 324 | 302 | 626 |

PRIMARY SCHOOLS. — Concluded.

| Districts. | ers. | | erage v Numbe | | | Averag ttenda | | ge ince. | r cent. of | Between 5 and 8 years. | years. | No. at |
|------------------|-----------|--------|------------------|--------|--------|------------------|--------|---------------------|--------------|------------------------|---------------|-------------------|
| Districts. | Teachers. | Boys. | Girls. | Total. | Boys. | Girls. | Total | Average Absence. | Per cent. of | Between 5 8 years. | Over 8 years. | Whole No. a date, |
| Henry L. Pierce, | 4 | 98 | 81 | 179 | 83 | 68 | 151 | 28 | 67. | 84 | 78 | 162 |
| Hugh O'Brien . | 12 | 432 | 260 | 692 | 383 | 225 | 608 | 84 | 88. | 394 | 308 | 702 |
| Hyde | 8 | 231 | 247 | 478 | 210 | 223 | 433 | 45 | 91. | 262 | 209 | 471 |
| John A. Andrew | 11 | 287 | 314 | 601 | 256 | 277 | 533 | 68 | 89. | 338 | 264 | 602 |
| Lawrence | 17 | 651 | 219 | 870 | 586 | 190 | 776 | 94 | 89. | 458 | 433 | 891 |
| Lewis | 10 | 244 | 255 | 499 | 211 | 214 | 425 | 74 | 85. | 247 | 274 | 521 |
| Lincoln | 5 | 192 | 80 | 272 | 167 | 71 | 238 | 34 | 88. | 146 | 135 | 281 |
| Lowell | 15 | 425 | 420 | 845 | 369 | 357 | 726 | 119 | 86. | 499 | 358 | 857 |
| Lyman | 8 | 231 | 152 | 383 | 208 | 133 | 341 | 42 | 89. | 187 | 214 | 401 |
| Martin | 3 | 92 | 89 | 181 | 80 | 77 | 157 | 24 | 87. | 80 | 44 | 124 |
| Mather | 10 | 264 | 249 | 513 | 230 | 208 | 438 | 75 | 84. | 290 | 226 | 516 |
| Minot | 5 | 118 | 103 | 221 | 105 | 89 | 194 | 27 | 88. | 142 | 85 | 227 |
| Mount Vernon . | 5 | 98 | 77 | 175 | 87 | 64 | 151 | 24 | 86. | 78 | 93 | 171 |
| Norcross | 13 | 192 | 412 | 604 | 172 | 366 | 538 | 66 | 89. | 309 | 295 | 604 |
| Phillips | 7 | 191 | 178 | 369 | 161 | 149 | 310 | 59 | 84. | 217 | 149 | 366 |
| Prescott | 8 | 188 | 190 | 378 | 172 | 170 | 342 | 36 | 90. | 213 | 195 | 408 |
| Prince | 4 | 109 | 109 | 218 | 94 | 95 | 189 | 29 | 87. | 110 | 135 | 245 |
| Quincy | 13 | 405 | 302 | 707 | 352 | 261 | 613 | 94 | 87. | 359 | 370 | 729 |
| Rice | 7 | 183 | 161 | 344 | 161 | 136 | 297 | 47 | 86. | 165 | 197 | 362 |
| Sherwin | 9 | 228 | 198 | 426 | 209 | 182 | 391 | 35 | 91. | 249 | 194 | 443 |
| Shurtleff | 6 | 154 | 160 | 314 | 136 | 134 | 270 | 44 | 86. | 156 | 159 | 315 |
| Stoughton | 4 | 123 | 136 | 259 | 113 | 121 | 234 | 25 | 90. | 159 | 105 | 264 |
| Thomas N. Hart | 9 | 353 | 151 | 504 | 309 | 131 | 440 | 64 | 87. | 287 | 215 | 502 |
| Tileston | 2 | 32 | 42 | 74 | 28 | 37 | . 65 | 9 | 88. | 41 | 33 | 74 |
| Warren | 7 | 175 | 173 | 348 | 162 | 157 | 319 | 29 | 91. | 179 | 160 | 339 |
| Wells | 15 | 398 | 430 | 828 | 349 | 375 | 724 | 104 | 89. | 491 | 353 | 844 |
| Winthrop | 6 | 133 | 130 | 263 | 111 | 108 | 219 | 44 | 84. | 166 | - 103 | 269 |
| Totals 4 | 166 | 12,668 | 11,367 | 24,035 | 11,220 | 9,866 | 21,086 | 2,949 | 87.7 | 13,143 | 11,319 | 24,462 |

PRIMARY SCHOOLS.

Number of Pupils in each Class, Whole Number, and Ages, Jan. 31, 1891.

| Districts. | First Class. | Second Class. | Third Class. | Whole Number. | Five years and under. | Six years. | Seven years. | Eight years. | Nine years. | Ten years. | Eleven years. | Twelve years. | Thirteen years and over. |
|-----------------|--------------|---------------|--------------|------------------|-----------------------|------------|--------------|--------------|-------------|------------|---------------|---------------|-----------------------------|
| Adams | 88 | 100 | 125 | 313 | 37 | 47 | 73 | 80 | 39 | 25 | 9 | 3 | |
| Agassiz | 44 | 77 | 73 | 194 | 21 | 44 | 44 | 34 | 33 | 13 | 3 | 2 | |
| Allston | 144 | 158 | 241 | 543 | 63 | 92 | 132 | 115 | 79 | 29 | 20 | 5 | 8 |
| Bennett | 69 | 127 | 151 | 347 | 43 | 69 | 66 | 80 | 58 | 21 | 7 | 2 | 1 |
| Bigelow | 194 | 205 | 276 | 675 | 65 | 145 | 181 | 140 | 81 | 47 | 12 | 3 | 1 |
| Bowditch | 78 | 102 | 109 | 289 | 37 | 65 | 64 | 65 | 35 | 12 | 8 | 3 | |
| Bowdoin | 92 | 118 | 115 | 325 | 22 | 61 | 75 | 73 | 67 | 23 | 1 | 3 | |
| Brimmer | 100 | 126 | 170 | 396 | 35 | 83 | 112 | 99 | 48 | 14 | 5 | | |
| Bunker Hill | 144 | 220 | 178 | 542 | 60 | 87 | 117 | 115 | 97 | 49 | 12 | 5 | |
| Chapman | 96 | 90 | 131 | 317 | 28 | 67 | 86 | 72 | 43 | 15 | 5 | 1 | |
| Chas. Sumner . | 108 | 184 | 155 | 447 | 64 | 104 | 103 | 106 | 41 | 29 | | | |
| Comins | 85 | 90 | 118 | 293 | 66 | 51 | 53 | 53 | 44 | 17 | 5 | 2 | 2 |
| Dearborn | 144 | 186 | 294 | 624 | 56 | 102 | 146 | 120 | 122 | 45 | 20 | 9 | 4 |
| Dillaway | 89 | 127 | 142 | 358 | 40 | 72 | 73 | 94 | 55 | 17 | 5 | 1 | 1 |
| Dudley | 153 | 206 | 298 | 657 | 59 | 134 | 127 | 153 | 86 | 57 | 22 | 12 | 7 |
| Dwight | 146 | 141 | 193 | 480 | 57 | 103 | 117 | 127 | 48 | 19 | 8 | 1 | |
| Edward Everett, | 112 | 149 | 177 | 438 | 51 | 94 | 95 | 98 | 66 | 21 | 10 | 3 | 3 |
| Eliot | 84 | 149 | 229 | 462 | 59 | 105 | 91 | 78 | 55 | 55 | 14 | 8 | 2 |
| Emerson | 129 | 176 | 259 | 564 | 56 | 99 | 134 | 97 | 98 | 46 | 17 | 13 | 4 |
| Everett | 133 | 152 | 249 | 534 | 44 | 93 | 141 | 134 | 1 79 | 31 | 9 | 2 | 1 |
| Franklin | 153 | 198 | 264 | 615 | 61 | 124 | 120 | 144 | 102 | 40 | 14 | 6 | 4 |
| Frothingham . | 169 | 163 | 168 | 500 | 60 | 101 | 97 | 98 | 3 76 | 5 51 | 16 | 1 | |
| Gaston | 141 | 151 | 177 | 469 | 65 | 93 | 115 | 103 | 6 | 20 | 3 | 2 | 1 |
| Geo. Putnam . | .54 | 72 | 96 | 222 | 29 | 44 | 49 | 5 | 5 28 | 3 10 | 6 1 | 1. | |
| Gibson | 69 | 108 | 148 | 325 | 37 | 60 | 92 | 70 | 0 4' | 7 15 | 2 7 | | |
| Hancock | 151 | 211 | 568 | 930 | 92 | 209 | 208 | 18 | 1 130 | 69 | 23 | 10 | 2 |
| Harris | 78 | 99 | 110 | 287 | 27 | 46 | 64 | 5 | 5 5 | 2 29 | 9 6 | 7 | 1 |
| Harvard | 148 | 197 | 281 | 626 | 57 | 128 | 139 | 13 | 5 10 | 5 43 | 3 18 | 1 | |

PRIMARY SCHOOLS. — Concluded.

| DISTRICTS. | First Class. | Second Class. | Third Class. | Whole Number. | Five years and under. | Six years. | Seven years. | Eight years. | Nine years. | Ten years. | Eleven years. | Twelve years. | Thirteen years and over. |
|-----------------|--------------|---------------|--------------|---------------|--------------------------|------------|--------------|--------------|-------------|------------|---------------|---------------|--------------------------|
| Henry L. Pierce | 42 | 88 | 32 | 162 | 7 | 38 | 39 | 37 | 28 | 8 | 5 | | |
| Hugh O'Brien, | 201 | 191 | 310 | 702 | 81 | 149 | 164 | 132 | 115 | 46 | 7 | 6 | 2 |
| Hyde | 109 | 140 | 222 | 471 | 46 | 92 | 124 | 81 | 86 | 22 | 13 | 3 | 4 |
| J. A. Andrew. | 143 | 227 | 232 | 602 | 80 | 133 | 125 | 117 | 82 | 45 | 11 | 4 | 5 |
| Lawrence | 231 | 250 | 410 | 891 | 114 | 158 | 186 | 183 | 148 | 70 | 22 | 8 | 2 |
| Lewis | 135 | 170 | 216 | 521 | 34 | 84 | 129 | 141 | 82 | 36 | 13 | 2 | |
| Lincoln | 85 | 84 | 112 | 281 | 23 | 59 | 64 | 67 | 48 | 11 | б | 2 | 1 |
| Lowell | 223 | 184 | 450 | 857 | 126 | 196 | 177 | 179 | 117 | 38 | 14 | 7 | 3 |
| Lyman | 95 | 134 | 172 | 401 | 46 | 67 | 74 | 96 | 71 | 33 | 11 | 2 | 1 |
| Martin | 36 | 42 | 46 | 124 | 21 | 27 | 32 | 20 | 14 | 10 | | | |
| Mather | 129 | 125 | 262 | 516 | 61 | 107 | 122 | 95 | 67 | 39 | 14 | 8 | 3 |
| Minot | 59 | 58 | 110 | 227 | 34 | 55 | 53 | 53 | 19 | 10 | 2 | 1 | |
| Mt. Vernon | 55 | 45 | 71 | 171 | 19 | 33 | 26 | 40 | 33 | 16 | 4 | | |
| Norcross | 127 | 183 | 294 | 604 | 70 | 114 | 125 | 118 | 90 | 47 | 27 | 9 | 4 |
| Phillips | 76 | 132 | 158 | 366 | 57 | 85 | 75 | 52 | 50 | 31 | 9 | 7 | |
| Prescott | 102 | 143 | 163 | 408 | 5 | 76 | 132 | 98 | 54 | 24 | 11 | 6 | 2 |
| Prince | 69 | 73 | 103 | 245 | 10 | 37 | 63 | 50 | 29 | 40 | 10 | 6 | |
| Quincy | 190 | 239 | 300 | 729 | 70 | 142 | 147 | 175 | 103 | 51 | 25 | 12 | 4 |
| Rice | 89 | 159 | 114 | 362 | 18 | 69 | 78 | 89 | 70 | 29 | 6 | 2 | 1 |
| Sherwin | 97 | 180 | 166 | 443 | 63 | 79 | 107 | 96 | 47 | 37 | 10 | 4 | |
| Shurtleff | 94 | 106 | 115 | 315 | 18 | 64 | 74 | 86 | 44 | 22 | 4 | 3 | |
| Stoughton | 70 | 91 | 103 | 264 | 35 | 59 | 65 | 63 | 28 | 11 | 1 | 1 | 1 |
| Thos. N. Hart, | 151 | 182 | 169 | 502 | 49 | 126 | 112 | 101 | 72 | 24 | 12 | 5 | 1 |
| Tileston | 21 | 12 | 41 | 74 | 15 | 14 | 12 | 27 | 6 | | | | |
| Warren | 104 | 102 | 133 | 339 | 32 | 71 | 76 | 79 | 58 | 18 | 5 | | |
| Wells | 198 | 267 | 379 | 844 | 103 | 171 | 217 | 189 | 108 | 45 | 9 | 2 | |
| Winthrop | 54 | 110 | . 105 | 269 | 53 | 56 | 57 | 48 | 29 | 18 | 3 | 3 | 2 |
| Totals | 6,180 | 7,799 | 10,483 | 24,462 | 2,681 | 4,883 | 5,569 | 5,278 | 3,579 | 1,652 | 554 | 208 | 78 |
| Percentages | 25.3 | 31.9 | 42.8 | 100. | 11. | 20. | 22.8 | 21.6 | 14.6 | 6.7 | 2.2 | .8 | .3 |

GRAMMAR SCHOOLS.

Number of Pupils to a Teacher, excluding Principals, Jan. 31, 1891.

| Schools, | No. of Teachers. | Average No. of Pupils. | No. of Pupils to a Teacher. | Schools. | No. of Teachers. | Average No. of Pupils. | No. of Pupils to a Teacher. |
|---------------|---------------------|------------------------|--------------------------------|----------------|------------------|------------------------|--------------------------------|
| Adams | 11 | 487 | 44.3 | H'n'y L.Pierce | 6 | 255 | 42.5 |
| Agassiz | 8 | 401 | 50.1 | Hugh O'Brien. | 14 | 765 | 54.6 |
| Allston | 14 | 715 | 51.1 | Hyde | 12 | 604 | 50.3 |
| Bennett | 10 | 535 | 53.5 | J. A. Andrew. | 14 | 745 | 53.2 |
| Bigelow | 14 | 735 | 52.5 | Lawrence | 17 | 831 | 48.8 |
| Bowditch | 7 | 366 | 52.3 | Lewis | 12 | 706 | 58.8 |
| Bowdoin | 9 | 362 | 40.2 | Lincoln | 11 | 555 | 50.4 |
| Brimmer | 14 | 619 | 44.2 | Lowell | 14 | 765 | 54.6 |
| Bunker Hill . | 14 | 697 | 49.7 | Lyman | 13 | 620 | 47.6 |
| Chapman | 12 | 602 | 50.2 | Martin | 10 | 356 | 35.6 |
| Chas. Sumner | 12 | 610 | 50.8 | Mather | 11 | 573 | 52.1 |
| Comins | 10 | 544 | 54.4 | Minot | 7 | 313 | 44.7 |
| Dearborn | 13 | 662 | 50.9 | Mt. Vernon | 6 | 229 | 38.1 |
| Dillaway | 11 | 579 | 52.6 | Norcross | 14 | 652 | 46.5 |
| Dudley | 14 | 617 | 44.1 | Phillips | 15 | 803 | 53.5 |
| Dwight | 13 | 664 | 51.0 | Prescott | 10 | 531 | 53.1 |
| Edw. Everett. | 10 | 585 | 58.5 | Prince | 10 | 496 | 49.6 |
| Eliot | 20 | 989 | 49.9 | Quincy | 11 | 554 | 50.3 |
| Emerson | 16 | 745 | 46.5 | Rice | 11 | 522 | 47.4 |
| Everett | 13 | 681 | 52.3 | Sherwin | 11 | 585 | 53.2 |
| Franklin | 14 | 734 | 52.4 | Shurtleff | 14 | 658 | 47.0 |
| Frothingham. | 12 | 632 | 52.6 | Stoughton | 10 | 427 | 42.7 |
| Gaston | 12 | 707 | 58.9 | Thos. N. Hart. | 8 | 433 | 54.1 |
| Geo. Putnam. | 7 | 354 | 50.6 | Tileston | 2 | 120 | 60.0 |
| Gibson | 8 | 389 | 48.6 | Warren | 13 | 679 | 52.0 |
| Hancock | 12 | 613 | 51.0 | Wells | 11 | 525 | 47.7 |
| Harris | 7 | 324 | 46.3 | Winthrop | 17 | 812 | 47.7 |
| Harvard | 13 | 613 | 47.1 | Totals | 634 | 31,675 | 49.9 |

PRIMARY SCHOOLS.

Number of Pupils to a Teacher, Jan. 31, 1891.

| DISTRICTS. | No. of Teachers. | Av. whole No. of Pupils. | No. of Pupils to a Teacher. | . Districts. | No. of Teachers. | Av. whole No. of Pupils. | No. of Pupils to a Teacher. |
|--------------|---------------------|--------------------------|--------------------------------|-----------------|---------------------|--------------------------|--------------------------------|
| Adams | 6 | 312 | 52.0 | Henry L. Pierce | 4 | 179 | 44.8 |
| Agassiz | 3 | 183 | 61.0 | Hugh O'Brien | 12 | 692 | 57.6 |
| Allston | 10 | 522 | 52.2 | Hyde | 8 | 478 | 59.7 |
| Bennett | 7 | 333 | 47.6 | J. A. Andrew | 11 | 601 | 54.6 |
| Bigelow | 12 | 659 | 54.9 | Lawrence | 17 | 870 | 51.2 |
| Bowditch | 6 | 271 | 45.1 | Lewis | 10 | 499 | 49.9 |
| Bowdoin | 8 | 310 | 38.7 | Lincoln | 5 | 272 | 54.4 |
| Brimmer | 8 | 361 | 45.1 | Lowell | 15 | 845 | 56.3 |
| Bunker Hill. | 12 | 542 | 45.2 | Lyman | 8 | 383 | 47.8 |
| Chapman | 6 | 314 | 52.3 | Martin | 3 | 181 | 60.3 |
| Ch's Sumner | 9 | 442 | 49.1 | Mather | 10 | 513 | 51.3 |
| Comins | 7 | 284 | 40.6 | Minot | 5 | 221 | 44.2 |
| Dearborn | 13 | 623 | 47.9 | Mt. Vernon | 5 | 175 | 35.0 |
| Dillaway | 7 | 345 | 49.3 | Norcross | 13 | 604 | 46.4 |
| Dudley | 13 | 629 | 48.3 | Phillips | 7 | 369 | 52.7 |
| Dwight | 10 | 474 | 47.4 | Prescott | 8 | 378 | 47.2 |
| Edw. Everett | 8 | 427 | 53.4 | Prince | 4 | 218 | 54.5 |
| Eliot | 8 | 470 | 58.7 | Quincy | 13 | 707 | 54.3 |
| Emerson | 10 | 569 | 56.9 | Rice | 7 | 344 | 49.1 |
| Everett | 10 | 521 | 52.1 | Sherwin | 9 | 426 | 47.3 |
| Franklin | 12 | 593 | 49.4 | Shurtleff | 6 | 314 | 52.3 |
| Frothingham | 9 | 503 | 55.9 | Stoughton | 4 | 259 | 64.8 |
| Gaston | 9 | 470 | 52.2 | Thos. N. Hart . | 9 | 504 | 56.0 |
| Geo. Putnam | 4 | 223 | 55.7 | Tileston | 2 | 74 | 37.0 |
| Gibson | 6 | 289 | 48.1 | Warren | 7 | 348 | 49.7 |
| Hancock | 13 | 908 | 69.8 | Wells | 15 | 828 | 55.2 |
| Harris | 5 | 296 | 59.2 | Winthrop | 6 | 263 | 43.8 |
| Harvard | 12 | 617 | 51.4 | Totals | 466 | 24,035 | 51.5 |

PRIMARY SCHOOLS.

Number of Pupils promoted to Grammar Schools for the five months ending Jan. 31, 1891.

| Districts. | Boys. | Girls. | Total. | Districts. | Boys. | Girls. | Total. |
|----------------|-------|--------|--------|-----------------|-------|--------|--------|
| Adams | 61 | 30 | 91 | Henry L. Pierce | 17 | 14 | 31 |
| Agassiz | 34 | 25 | 59 | Hugh O'Brien | 92 | 64 | 156 |
| Allston | 57 | 73 | 130 | Hyde | 46 | 36 | 82 |
| Bennett | 37 | 30 | 67 | John A. Andrew | 54 | 45 | 99 |
| Bigelow | 70 | 45 | 115 | Lawrence | 115 | 12 | 127 |
| Bowditch | 35 | 30 | 65 | Lewis | 76 | 76 | 152 |
| Bowdoin | 32 | 41 | 73 | Lincoln | 60 | 22 | 82 |
| Brimmer | 37 | 47 | 84 | Lowell | 99 | 89 | 188 |
| Bunker Hill | 69 | 62 | 131 | Lyman | 42 | 34 | 76 |
| Chapman | 59 | 37 | 96 | Martin | 29 | 20 | 49 |
| Charles Sumner | 64 | 67 | 131 | Mather | 79 | 51 | 130 |
| Comins | 38 | 30 | 68 | Minot | 26 | 38 | 64 |
| Dearborn | 68 | 54 | 122 | Mt. Vernon | 15 | 12 | 27 |
| Dillaway | 60 | 44 | 104 | Norcross | 34 | 79 | 113 |
| Dudley | 73 | 76 | 149 | Phillips | 39 | 33 | 72 |
| Dwight | 100 | 63 | 163 | Prescott | 67 | 48 | 115 |
| Edward Everett | 58 | 55 | 113 | Prince | 31 | 37 | 68 |
| Eliot | 62 | 18 | 80 | Quincy | 60 | 28 | 88 |
| Emerson | 63 | 48 | 111 | Rice | 37 | 32 | 69 |
| Everett | 64 | 68 | 132 | Sherwin | 54 | 42 | 96 |
| Franklin | 60 | 81 | 141 | Shurtleff | 28 | 23 | 51 |
| Frothingham | 42 | 53 | 95 | Stoughton | 31 | 28 | 59 |
| Gaston | 48 | 100 | 148 | Thomas N. Hart | 69 | 44 | 113 |
| George Putnam | 26 | 32 | 58 | Tileston | 14 | 10 | 24 |
| Gibson | 36 | 35 | 71 | Warren | 45 | 59 | 104 |
| Hancock | 95 | 92 | 187 | Wells | 112 | 91 | 203 |
| Harris | 28 | 31 | 59 | Winthrop | 18 | 15 | 33 |
| Harvard | 36 | 27 | 63 | Totals | 2,901 | 2,476 | 5,377 |

GRAMMAR SCHOOLS.

Number of Diploma-Scholars, June, 1890. Number of these admitted to High and Latin Schools, September, 1890.

| | Dı | PLOMA | .s. | and hools. | | Di | PLOMAS | | and hools. |
|---------------|-------|--------|--------|-------------------------------------|---------------|-------|--------|--------|-------------------------------------|
| Schools. | Boys. | Girls. | Total. | Admitted to High and Latin Schools. | Schools. | Воуя. | Girls. | Total. | Admitted to High and Latin Schools. |
| Adams | 24 | 17 | 41 | 23 | H'n'yL.Pierce | 16 | 14 | 30 | 20 |
| Agassiz | 31 | | 31 | 21 | H'gh O'Brien | 17 | 24 | 41 | 25 |
| Allston | 26 | 25 | 51 | 26 | Hyde | | 32 | 32 | 14 |
| Bennett | 24 | 20 | 44 | 30 | J. A. Andrew | 18 | 19 | 37 | 15 |
| Bigelow | 46 | | 46 | 21 | Lawrence | 53 | | 53 | 18 |
| Bowditch | | 31 | 31 | 20 | Lewis | 31 | 41 | 72 | 57 |
| Bowdoin | | 31 | 31 | 15 | Lincoln | 42 | | 42 | 22 |
| Brimmer | 28 | | 28 | 12 | Lowell | 20 | 27 | 47 | 21 |
| Bunker Hill | 27 | 32 | 59 | 29 | Lyman | 23 | 14 | 37 | 18 |
| Chapman | 18 | 29 | 47 | 23 | Martin | 12 | 29 | 41 | 10 |
| Chas. Sumner. | 14 | 21 | 35 | 11 | Mather | 13 | 27 | 40 | 16 |
| Comins | 27 | 17 | 44 | 20 | Minot | 8 | 17 | 25 | 13 |
| Dearborn | 17 | 18 | 35 | 18 | Mt. Vernon . | 8 | 9 | 17 | 15 |
| Dillaway | | 38 | 38 | 22 | Norcross | | 27 | 27 | 12 |
| Dudley | 42 | | 42 | 29 | Phillips | 42 | | 42 | 19 |
| Dwight | 56 | | 56 | 23 | Prescott | 21 | 26 | 47 | 20 |
| Edw. Everett | 12 | 33 | 45 | 27 | Prince | 38 | 47 | 85 | 47 |
| Eliot | 42 | | 42 | 18 | Quincy | 31 | | 31 | 9 |
| Emerson | 17 | 24 | 41 | 23 | Rice | 45 | | 45 | 27 |
| Everett | | 75 | 75 | 46 | Sherwin | 38 | | 38 | 7 |
| Franklin | | 35 | 35 | 10 | Shurtleff | | 54 | 54 | 27 |
| Frothingham | 19 | 26 | 45 | 20 | Stoughton | 21 | 18 | 39 | 25 |
| Gaston | | 48 | 48 | 21 | Thos. N. Hart | 32 | | 32 | 22 |
| George Putnam | 9 | 17 | 26 | 17 | Tileston | 9 | 2 | 11 | 19 |
| Gibson | 18 | 16 | 34 | | Warren | 19 | 29 | 48 | 26 |
| Hancock | | 19 | 19 | 9 | Wells | | 32 | 32 | 14 |
| Harris | 11 | 16 | 27 | 23 | Winthrop | | 54 | 54 | 18 |
| Harvard | 21 | 32 | 53 | 26 | Totals | 1086 | 1,162 | 2,248 | 1,139 |

TABLE SHOWING (a) THE NUMBER OF PUPILS IN EACH CLASS OF THE GRAMMAR AND PRIMARY SCHOOLS IN OCTOBER, 1890, AND (b) THE NUMBER IN EACH CLASS WHO WERE MEMBERS OF THE SAME CLASS ONE YEAR BEFORE.

| | | Gr | AMMAR | CLASS | ES. | | UNGRADED CLASS. | PRIMA | RY CL | ASSES. |
|----------------------------|--|----------|-----------|-----------|------------------|--|--------------------|-----------|---|--|
| District. | I. | 11. | 111. | IV. | v. | VI. | UNGRADE CLASS. | I. | II. | 111. |
| Adams (a) | 38 | 53 4 | 97 25 | 99 | 105 | 94 | 24 14 | 91 | 98 | 122 45 |
| Agassiz (a) | 37 | 38 3 | 55 8 | 111 4 | 56 10 | 106 19 | | 41 | 50 6 | 84 42 |
| Allston (a) | 98 | 98 | 111 | 118 4 | $121 \\ 4$ | 166 31 | | 144 11 | 149 1 | 216 94 |
| Bennett (a) | 46 | 88 | 80 | 112 25 | 112 16 | $\begin{array}{c} 112 \\ 25 \end{array}$ | | 64 | 118 22 | 152 30 |
| Bigelow (a) | 48 | 92 •• | 114 | 169 10 | 165 | 159 43 | | 191 40 | 207 56 | $\begin{array}{c} 271 \\ 72 \end{array}$ |
| Bowdoin (a) | 38 2 | 36 1 | 67 1 | 47 | 87 3 | 85 4 | | 93 | 100 24 | $\begin{array}{c} 115 \\ 21 \end{array}$ |
| Brimmer (a) | $\begin{array}{c} 35 \\ 2 \end{array}$ | 92 40 | 88 20 | 92 9 | 138 33 | $\begin{array}{c} 136 \\ 24 \end{array}$ | 33 13 | 102 10 | $\begin{array}{c} 124 \\ 3 \end{array}$ | $\begin{array}{c} 152 \\ 21 \end{array}$ |
| Bunker Hill (a) (b) | 48 1 | 64 3 | 101 10 | 154 13 | 152 19 | 163 23 | 35 4 | 151 10 | 179 20 | 214 49 |
| Chapman (a) | 50 | 61 | 101 38 | 109 25 | 162 18 | 132 35 | | 104 1 | 90 5 | 122 41 |
| Charles Sumner (a) (b) | 45 | 49 | 87 12 | 122 29 | 133 20 | 172 19 | | 108 4 | 189 5 | 147 12 |
| Comins (a) (b) | 47 | 96 9 | 96 4 | 103 2 | 102 6 | 106 | | 88 | 92 10 | 107 33 |
| Dearborn (a) (b) | 47 | 74 11 | 92 2 | 113 | $\frac{149}{32}$ | 167 29 | 24 | 134 6 | 202 25 | 282 86 |
| Dillaway (a) | 46 | 85 24 | 107 13 | 105 | 116 16 | 125 13 | | 79 | 138 9 | $\frac{126}{24}$ |
| Dudley (a) | 50 | 80 17 | 95 3 | 142 16 | 113 | 112 | 24 4 | 155 4 | 209 16 | 265 61 |
| Dwight (a) | 56 | 98 | 103 | 155 | 109 2 | 112 | 23 6 | 99 | 197 | 176 13 |
| Edward Everett (a) | 49 | 76 | 106 21 | 114 10 | 121 27 | 125 11 | | 116 | 157 2 | 170 32 |

TABLE SHOWING (a) THE NUMBER OF PUPILS IN EACH CLASS OF THE GRAMMAR AND PRIMARY SCHOOLS IN OCTOBER, 1890, AND (b) THE NUMBER IN EACH CLASS WHO WERE MEMBERS OF THE SAME CLASS ONE YEAR BEFORE. — Continued.

| | | Gr. | AMMAR | CLASS | ES. | | ADED SS. | PRIMA | RY CL | ASSES. |
|---------------------------|----------|-----------|-----------|---|-----------|---|--------------------|-----------|-----------|------------|
| District. | ı. | II. | m. | ıv. | v. | vi. | UNGRADED ULASS. | 1. | ıı. | III. |
| Eliot (a) | 52 | 111 15 | 107 | 166 | 162 4 | 164 | 255 151 | 136 | 156 63 | 163 74 |
| Emerson (a) | 45 | 52 1 | 121 3 | 181 9 | 179 | 175 27 | | 132 7 | 205 27 | 229 28 |
| Everett (a) | 77 | 99 16 | 110 11 | 110 9 | 158 10 | 109 7 | ? | 137 | 136 3 | 231 14 |
| Franklin (a) | 77 | 112 8 | 115 1 | 111 5 | 172 39 | 154 6 | • • | 154 12 | 191 27 | 231 62 |
| Frothingham (a) (b) | 45 | 63 2 | 112 14 | 113 7 | 113 1 | 158 12 | 33 11 | 171 | 164 5 | 173 15 |
| Gaston (a) | 52 | 107 | 112 1 | $\begin{array}{c} 114 \\ 2 \end{array}$ | 163 8 | 168 1 | | 155 8 | 152 14 | 168 35 |
| George Putnam (a) (b) | 31 14 | 70 15 | 55 7 | 55 9 | 56 15 | 55 14 | 35 •• | 55 | 88 20 | 81 34 |
| Gibson (a) | 46 | 42 | 51 3 | 80 6 | 78 9 | 9 4 9 | | 66 5 | 99 17 | 123 12 |
| Hancock (a) | 46 11 | 50 8 | 50 | 107 17 | 104 1 | 111 10 | 122 18 | 157 | 287 48 | 477 175 |
| Harris (a) | 36 | 37 | 53 | 61 1 | 80 | 58 | • • | 89 2 | 101 16 | 112 29 |
| Harvard (a) | 55 | 58 3 | 104 18 | 100 4 | 149 34 | 122 10 | 31 9 | 143 1 | 188 10 | 306 61 |
| Hillside (a) | 41 | 55 11 | 56 3 | 54 14 | 75 15 | 85 6 | | 67 | 97 27 | 96 20 |
| Hugh O'Brien (a) (b) | 68 | 94 9 | 102 17 | 110 8 | 143 18 | 193 57 | •• | 195 16 | 189 19 | 304 143 |
| Hyde (a) | 35 2 | 90 34 | 102 23 | 104 12 | 100 | $\begin{array}{c} 165 \\ 2 \end{array}$ | 27 8 | 96 1 | 150 3 | 192 12 |
| John A. Andrew (a) (b) | 39 1 | 58 3 | 160 34 | 166 9 | 163 24 | 146 11 | 31 4 | 145 12 | 165 7 | 242 21 |
| Lawrence (a) | 79 1 | 101 | 112 | 160 10 | 143 | 178 13 | 63 33 | 231 | 245 4 | 392 |

TABLE SHOWING (a) THE NUMBER OF PUPILS IN EACH CLASS OF THE GRAMMAR AND PRIMARY SCHOOLS IN OCTOBER, 1890, AND (b) THE NUMBER IN EACH CLASS WHO WERE MEMBERS OF THE SAME CLASS ONE YEAR BEFORE. — Continued.

| | | Gr. | AMMAR | CLASS | ES. | | ADED. | Prima | RY CL | ASSES. |
|---|-----------|-----------|-----------|-----------|-----------|-----------|--------------------|-----------|------------------|-------------------|
| District. | I. | II. | III. | IV. | v. | VI. | UNGRADED CLASS. | I. | II. | 111. |
| Lewis (a) | 83 | 105 | 117 | 115 | 125 13 | 173 20 | | 134 | 160 16 | 21 2 77 |
| Lincoln (a) | 35 • • | 77 2 | 91 3 | 110 4 | 92 2 | 125 10 | 32 15 | 91 10 | 79 5 | 98 18 |
| Lowell (a) | 40 | 123 13 | 101 10 | 151 12 | 159 6 | 170 8 | | 214 7 | 238 30 | 367 78 |
| Lyman (a) | 56 2 | 60 | 94 25 | 114 6 | 133 23 | 134 20 | 37 4 | 97 1 | 130 10 | 148 20 |
| Martin (a) | 50 1 | 79 14 | 50 | 63 | 52 · · | 64 | | 36 2 | 41 | 49 1 |
| Mather (a) | 44 1 | 53 4 | 102 16 | 107 | 102 17 | 166 29 | | 125 9 | 153 8 | 214 25 |
| $\begin{array}{c} \text{Minot } (a) \dots \\ (b) \dots \end{array}$ | 29 | 32 | 45 1 | 50 6 | 72 24 | 84 29 | .: | 58 | 52 7 | 105 38 |
| Mt. Vernon (a) (b) | 29 | 33 2 | 33 3 | 48 9 | 36 2 | 51 11 | | 52 1 | 46 | 73 20 |
| Norcross (a) | 29 12 | 52 8 | 108 30 | 154 38 | 143 21 | 176 15 | | 127 10 | 177 9 | 296 82 |
| Phillips (a) (b) | 44 | 88 4 | 91 | 167 31 | 163 14 | 174 6 | 76 7 | 73 1 | 12 2 9 | 175 21 |
| Pierce (a) | 37 2 | 46 3 | 44 15 | 50 | 41 | 44 7 | | 45 2 | 82 8 | 69 12 |
| Prescott (a) | 49 | 60 2 | 80 7 | 108 15 | 132 22 | 114 18 | | 105 3 | 140 16 | 150 15 |
| Prince (a)(b) | 49 | 75 1 | 86 10 | 94 5 | 92 2 | 87 | • • | 57 | 61 13 | 82 15 |
| Quincy (a) | 36 •• | 42 | 51 | 110 10 | 111 4 | 169 29 | 42 18 | | 236 10 | 272 22 |
| Rice (a) | 47 | 61 3 | 83 5 | 89 2 | 107 3 | 112 7 | 21 2 | 88 | 145 33 | 103 8 |
| Sherwin (a) (b) | 34 | 55 7 | 97 20 | 109 13 | 157 47 | 90 2 | 39 9 | | 135 5 | 198 10 |

TABLE SHOWING (a) THE NUMBER OF PUPILS IN EACH CLASS OF THE GRAMMAR AND PRIMARY SCHOOLS IN OCTOBER, 1890, AND (b) THE NUMBER IN EACH CLASS WHO WERE MEMBERS OF THE SAME CLASS ONE YEAR BEFORE.—Concluded.

| | | GR | AMMAI | R CLAS | ses. | | UNGRADED CLASS.1 | PRIMA | ARY CI | ASSES |
|----------------------------|-------------|----------|-----------|-----------|--------------|-----------|---------------------|-----------|-----------|---------------|
| DISTRICT. | I. | п. | III. | IV. | v. | VI. | UNGR | I. | 11. | ш. |
| Shurtleff (a) (b) | 57 | 57 1 | 96 | 96 | | 150 27 | • • | 97 | 102 | |
| Stoughton (a) (b) | 49 | 66 12 | 66 13 | | | 90 24 | | 70 13 | | 109 12 |
| Thomas N. Hart (a) (b) | 34 | 54 5 | 86 10 | 95 8 | | 78 4 | | 163 15 | | 171 |
| Tileston (a) (b) | 14 | 19 | 23 1 | 15 | 25 | 26 1 | | 21 1 | 13 | 44 |
| Warren (a) | 46 | 62 4 | 113 25 | 120 5 | 162 25 | 159 13 | 31 9 | 101 2 | 98 5 | 150 38 |
| Wells (a)(b) | 39 1 | 53 1 | 53 1 | 111 12 | 89 3 | 103 11 | 79 7 | 200 3 | 265 28 | 356 81 |
| Winthrop (a) (b) | 59 2 | 96 16 | 107 3 | 148 20 | 213 19 | 182 33 | | 79 | 82 15 | 91 15 |
| Total (a) | 2,591 60 | | | | 6,566 747 | | 1,117 349 | | | 9,893 $2,050$ |

TABLE SHOWING THE NUMBER OF CHILDREN, THIRTEEN OR MORE YEARS OF AGE, LEAVING THE GRAMMAR SCHOOLS BEFORE GRADUATION, WITH THEIR AGES AND THE CLASSES TO WHICH THEY BELONGED.

| | Sixteen and over. | ∞ | 4 | 20 | 13 | _ | 3 | 6 | 6 | 2 | 11 | ∞ |
|--|---|-------|----------|---------|---------|---------|----------|---------|---------|-------------|---------|----------------|
| eaving. | Fifteen. | 18 | 12 | 14 | 12 | 11 | 6 | 00 | 50 | 15 | 11 | 13 |
| Age at Leaving. | Fourteen. | 20 | 12 | ∞ | 15 | 13 | 12 | 13 | 35 | 53 | 17 | 13 |
| ¥ | Thirteen. | 13 | <u>∞</u> | 4 | 12 | 53 | 6 | 6 | 16 | 19 | 9 | ∞ |
| 9 | Primary. | : | : | _ | : | : | : | : | : | : | : | : |
| Belonging at the end of their Schooling to | .bobsrgaU | - | : | : | : | : | : | : | က | 70 | : | 89 |
| ir Scl | Class VI. | ಣ | : | ಣ | 62 | 62 | : | က | ಣ | 9 | : | က |
| of the | Class V. | : | 70 | က | 9 | 00 | 9 | 7 | 17 | 12 | 12 | 20 |
| e end | Class IV. | 21 | 13 | 11 | 7 | 19 | 9 | 70 | 16 | 16 | 11 | 13 |
| at the | Class III. | 20 | 9 | 6 | 18 | 12 | 13 | 13 | 17 | 16 | 12 | 15 |
| nging | Class II. | œ | 11 | 17 | 13 | 12 | 9 | 6 | 22 | 13 | 6 | - |
| Belo | Class I. | 9 | _ | 67 | 9 | _ | 63 | 67 | 23 | 62 | 1 | 67 |
| r school- | Ended thei ing at the leaving. | 59 | 36 | 46 | 52 | 54 | 33 | 39 | 80 | 02 | 45 | 42 |
| r proba- ed some school. | Oertainly o bly enter other day | 13 | 16 | 24 | 12 | 49 | 24 | 25 | 43 | 22 | 28 | - 82 |
| 'əunc uj | Graduates 1890. | 41 | 30 | 54 | 44 | 46 | 35 | 34 | 58 | 62 | 47 | 34 |
| age to er | Total numb more year discharge year endi | 113 | 83 | 124 | 108 | 149 | 92 | 86 | 151 | 154 | 120 | 104 |
| elonging rammari ls .nsl | to the C | 527 | 386 | 929 | 534 | 743 | 377 | 342 | 645 | 712 | 597 | 532 |
| | School and District. | Adams | Agassiz | Allston | Bennett | Bigelow | Bowditch | Bowdoin | Brimmer | Bunker Hill | Chapman | Charles Sumner |

| 1 | 22 | 10 | : | 15 | 10 | 10 | 17 | ಣ | ∞ | 4 | 1 | 70 | ಣ | 7 | 4 | တ |
|--------|----------|----------|--------|--------|----------------|-------|---------|---------|----------|-------------|--------|---------------|--------|---------|---------|---------|
| 16 | 19 | 7 | 18 | 18 | 29 | 41 | 30 | 14 | 17 | 17 | 12 | 4 | 4 | 10 | 12 | 13 |
| 20 | 23 | 16 | 36 | 16 | 12 | 89 | 22 | -14 | 28 | 20 | 133 | 9 | 11 | 41 | ∞ | 18 |
| 36 | 16 | : | 18 | 17 | 4 | 45 | 30 | ∞ | 18 | 17 | ಣ | 4 | 7 | 88 | 00 | 16 |
| : | П | : | : | : | : | : | ေ | : | : | : | : | : | : | : | provid. | : |
| : | 7 | : | - | 4 | : | 42 | ಣ | 4 | : | 55 | : | : | : | 32 | : | ಸಾ |
| 4 | 6 | - | ಣ | ಣ | _ | 12 | 10 | 62 | 63 | ಣ | ಣ | - | 1 | 6 | _ | : |
| 11 | 9 | 4 | 13 | ಣ | 4 | 67 | 14 | 4 | 7 | 10 | 4 | : | 9 | 13 | 0 | 10 |
| 21 | 4 | 7 | 21 | 15 | 6 | 29 | 25 | 6 | 15 | 13 | က | ಣ | 23 | 19 | 4 | 15 |
| 22 | 10 | 7 | 25 | 13 | = | 32 | 28 | 6 | 23 | 17 | ∞ | 7 | 4 | 2 | 12 | 10 |
| 24 | 15 | 13 | 6 | 21 | 4 | 33 | 15 | 11 | 20 | 10 | 4 | 00 | 10 | œ | 4 | 7 |
| Ξ | 00 | 7 | : | 7 | 22 | 23 | _ | : | 4 | : | 87 | : | 22 | 00 | 1 | ಣ |
| 93 | 09 | 33 | 72 | 99 | 31 | 185 | 66 | 39 | 7.1 | 80 | 29 | 19 | 25 | 96 | 32 | 20 |
| 15 | 14 | 28 | 34 | 45 | 33 | 26 | 28 | 52 | 53 | 28 | 21 | 11 | 6 | 27 | 12 | 21 |
| 44 | 35 | 39 | 42 | 26 | 46 | 52 | 41 | 75 | 37 | 45 | 48 | 27 | 34 | 19 | 27 | 53 |
| 152 | 109 | 130 | 148 | 167 | 110 | 263 | 198 | 166 | 137 | 131 | 86 | 52 | 89 | 142 | 7.1 | 124 |
| 503 | 989 | 563 | 299 | 999 | 544 | 994 | 730 | 099 | 710 | 669 | 647 | 322 | 367 | 581 | 309 | 630 |
| Comins | Dearborn | Dillaway | Dudley | Dwight | Edward Everett | Eliot | Emerson | Everett | Franklin | Frothingham | Gaston | George Putnam | Gibson | Hancock | Harris | Harvard |

TABLE SHOWING THE NUMBER OF CHILDREN, THIRTEEN OR MORE YEARS OF AGE, LEAVING THE GRAMMAR SCHOOLS BEFORE GRADUATION, WITH THEIR AGES AND THE CLASSES TO WHICH THEY BELONGED. — Concluded.

| | gaigaole tamast tamast ts.ast | ega to ar guirub ba | ,əant ai | ed some | foods r | Belo | nging | Belonging at the end of their Schooling | end | of the | ir Sch | looling | to to | 4 | Age at Leaving. | eaving | |
|----------------------|--|--|-------------|---|---------------------------------------|----------|-----------|---|-----------|----------|-----------|-----------|----------|-----------|---|----------|----------------------|
| SCHOOL AND DISTRICT. | to the | Total numl more yea discharge year endi | Graduates . | Oertainly o represented Oeber day | Ended their ing at the leaving. | Class I. | .II sasID | Class III. | Class IV. | Class V. | .IV aasIO | Ungraded. | Primary. | Тріптееп. | Fourteen. | Fifteen. | Sixteen and over. |
| Henry L. Pierce | 260 | 51 | 33 | 9 | 12 | 10 | 70 | | - | : | : | : | : | 2 | 01 | 3 | 5 |
| Hugh O'Brien | 727 | 107 | 41 | 35 | 31 | 62 | 10 | 10 | 4 | 1 | : | 4 | • | 10 | 13 | 10 | ಣ |
| Hyde | 604 | 118 | 32 | 13 | 73 | 10 | 21 | 22 | ∞ | 63 | 4 | 9 | : | 23 | 18 | 20 | 12 |
| John A. Andrew | 190 | 142 | 39 | 14 | 89 | 63 | 15 | 20 | 36 | 6 | ಣ | 4 | : | 21 | 44 | 17 | 2 |
| Lawrence | 849 | 170 | 53 | 19 | 86 | П | 34 | 30 | 25 | 63 | - | 70 | : | 26 | 28 | 11 | အ |
| Lewis | 621 | 117 | 75 | 20 | 22 | : | ∞ | 4 | ಣ | 9 | - | : | : | 00 | 7 | က | 4 |
| Lincoln | 563 | 116 | 42 | 23 | 51 | : | 9 | 14 | 23 | 70 | 69 | : | : | 14 | 22 | 12 | ಣ |
| Lowell | 736 | 87 | 47 | 24 | 16 | : | 6 | 4 | 63 | 1 | : | : | : | - | 00 | 4 | အ |
| Lyman | 677 | 150 | 40 | 33 | 11 | 1 | 10 | 30 | 11 | 20 | 6 | | : | 56 | 40 | œ | ಣ |
| Martin | 372 | 06 | 42 | 16 | 32 | - | 12 | 6 | 10 | : | : | : | : | 00 | ======================================= | œ | 10 |
| Mather | 533 | 66 | 41 | 13 | 45 | ಣ | 10 | 17 | 4 | 13 | | : | ଦା | 17 | 12 | 12 | 4 |

| 25 14 37 | 37 | | 9 | 12 | 6 | 4 | 4 | <u>01</u> | : | : | t~ | t• | 15 |
|--------------|----|-------|-----|-----|-----|-----|-----|-----------|-----|----|-----|------|-----|
| 17 9 | | 6 | က | 2 | - | 62 | - | : | • | : | 1 | 4 | - |
| 27 18 | | 108 | 9 | 20 | 22 | 40 | 11 | 00 | : | - | 32 | 46 | 23 |
| 42 39 | | 112 | 4 | 00 | 22 | 39 | 25 | : | 14 | : | 41 | 42 | 23 |
| 55 14 | | 51 | : | 1 | 20 | 18 | 10 | 7 | : | : | 23 | 18 | 7 |
| 85 35 | | 11 | - | 4 | େ | ಣ | - | : | : | : | 4 | : | ಣ |
| 31 49 | | 118 | 6 | 13 | 19 | 31 | 24 | 10 | 12 | : | 32 | 62 | 17 |
| 46 27 | | 65 | 2 | 00 | 23 | 14 | 6 | 23 | 4 | : | 13 | 25 | 15 |
| 38 25 | | 29 | | 6 | 26 | 17 | 70 | П | ∞ | : | 56 | . 25 | 13 |
| 54 18 | | 47 | 7 | : | 22 | 13 | 00 | 23 | : | : | 18 | 15 | ∞ |
| 41 12 | | 15 | ಣ | 9 | ಣ | 63 | : | : | : | | 31 | 7 | ಣ |
| 32 6 | | 19 | - | 1 | 55 | ∞ | 4 | : | : | : | 13 | 4 | 23 |
| 12 4 | | ŭ | П | 1 | Ç! | - | : | : | : | : | 1 | 73 | : |
| 48 30 | | 81 | ÷ | 10 | 21 | 19 | 20 | 23 | 00 | : | 18 | 32 | 17 |
| 37 14 | | 20 | 22 | ∞ | 7 | 14 | 00 | ಣ | ∞ | : | 6 | 21 | 13 |
| 55 38 | | 105 | 7 | 24 | 21 | 39 | 11 | : | က | : | 31 | 36 | 28 |
| 2,305 1,345 | | 3,057 | 153 | 009 | 782 | 748 | 423 | 149 | 192 | 10 | 865 | 1161 | 691 |



SCHOOL DOCUMENT NO. 13 — 1891.

SYNOPSIS

OF

FRENCH AND GERMAN INSTRUCTION.

BOSTON HIGH SCHOOLS.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

In School Committee, Boston, May 12, 1891.

Ordered, That the Synopsis of the Instruction in Modern Languages in High Schools be printed as a School Document, and that six hundred copies of the same be printed.

Passed.

Attest:

PHINEAS BATES,

Secretary.

PROGRAMME FOR THE YEAR 1891-92.

HIGH SCHOOLS.

FRENCH. — FIRST YEAR.

- 1. Reading. Super's French Reader, 100 pages, including La dernière classe, and not including M. Martin de Montmartre. Advanced beginners will read all the prose in the book (145 pages), and a story by Daudet. It is suggested that from the very beginning as much time as possible be devoted to translation at sight.
- 2. Pronunciation. Practice in reading and speaking French immediately after the teacher. It is of the greatest importance that the pupils' ears and vocal organs be well trained during this first year. Reading aloud should, in general, follow rather than precede translation.
- 3. Grammar. First half-year: the conjugation of avoir, être, and the regular verbs; the use of conjunctive personal pronouns; the use of the articles; and the formation of feminines and plurals. Second half-year: Keetels' Elementary French Grammar, 18 lessons; the conjugation of aller, devoir, dire, faire, falloir, pouvoir, savoir, venir, voir, vouloir, and at least five more irregular verbs. French-English exercises should be recited with the books closed, the scholar repeating the French sentences after the teacher, and then translating them into English.
- 4. Composition. Exercises based on Super's French Reader.
- 5. Conversation based on 1 and 4: practice in interpreting and constructing simple sentences.

SECOND YEAR.

- 1. Reading. From 300 to 350 pages. [Teachers should insist that all English versions be given in idiomatic English. Every endeavor should be made to interest pupils in the subject-matter, and to make them regard their text-books as literature. If a story or play moves in an unfamiliar sphere, the surroundings should be briefly explained beforehand. Passages of an abstruse or technical nature should be translated by the instructor. It is suggested that as much time as possible be given to translation at sight.]— Either A or B:—
- A.—I. Either Colomba (Mérimée) or L'abbé Constantin (Halévy). II. Abeille (France), to be used for sight reading. III. One of the following plays: La poudre aux yeux (Labiche and Martin), Les petits oiseaux (Labiche and Delacour), La maison de Penarvan (Sandeau). IV. Daudet: Le siège de Berlin, L'enfant espion, Salvette et Bernadou.
- B. I. Le conscrit de 1813 (Erckmann-Chatrian). II. All the stories in Jenkins' Le siège de Berlin (Daudet).
- 2. Composition. Exercises based on Le siège de Berlin (Daudet).
- 3. Grammar. Keetels' Elementary French Grammar, 46 lessons. French-English exercises should, in general, be recited with the books closed.
- 4. Pronunciation. At least half of the reading aloud should consist of the repetition, by the pupils, of sentences just read by the teacher. This exercise should usually follow rather than precede the translation of the passage.
- 5. Conversation based on 1 or 2. Aside from set exercises, the French language should be used as much as possible in the class-room.

THIRD YEAR.1

- 1. Reading. From 400 to 450 pages. [See general suggestions under Second Year. Teachers are advised to give a little time to reading French without translation, making sure, by means of questions, that the pupils understand what they read.] I. Either Fontaine's Historiettes modernes, Vol. i., or half of Au coin du feu (Souvestre). II. One of the following plays: Mlle. de la Seiglière (Sandeau), Les doigts de fée (Scribe and Legouvé), Bataille de dames (Scribe and Legouvé). III. Either La mère de la marquise (About) or Un philosophe sous les toits (Souvestre). IV. Molière: either Le bourgeois gentilhomme or L'avare.
- 2. Composition. Composition and dictation exercises based on subjects in French literature (furnished by the Director).
- 3. Conversation based on 1 and 2. The French language should be used as much as possible in the class-room.
- 4. Grammar. Syntax; and, if necessary, reviews by topics.

FOURTH YEAR.2

- 1. Reading. About 500 pages. I. La Belle-Nivernaise (Daudet) and Price's Choix d'extraits de Daudet. II. Either La neuvaine de Colette or Marcillac's Manuel d'histoire de la littérature française. III. Either Les précieuses ridicules (Molière) or thirty fables by La Fontaine. IV. One play by Racine. V. One play by Corneille.
- 2. Conversation based on 1. The French language should be used as much as possible in the class-room.
- 3. Composition. Exercises based on La Belle-Nivernaise (Daudet).

¹ If it seem desirable to the teacher and the principal, the following course may be substituted for the regular third year's work: a careful study of *Un philosophe sous les toits* (Souvestre) and 40 of Hennequin's *Lessons in Idiomatic French*.

² Classes that are being prepared for college may substitute for the regular fourth year's work a course based on the Harvard admission requirements.

GERMAN. - FIRST YEAR.

- 1. Reading. Brandt's German Reader, 75 pages, selected from Parts i., ii., iii., and iv. Advanced beginners will read all of the first three parts (122 pages). It is suggested that from the very beginning as much time as possible be devoted to translation at sight.
- 2. Grammar. First half-year: the active voice of a regular weak verb; the conjugation of haben, sein, and werden; the declension of articles, nouns, pronouns, and adjectives; the simpler rules of word order; the use of the commoner prepositions and conjunctions; the formation of the passive; the conjugation of a strong verb. Second half-year: Collar's German Lessons (Eysenbach), 14 lessons, omitting, if necessary, half of the exercises; the principal parts of at least 50 strong or irregular verbs. Advanced beginners will study also the use of the modal auxiliaries.
- 3. Pronunciation. Practice in reading and speaking German sentences immediately after the teacher. It is of the greatest importance that the pupil's ears and vocal organs be well trained during this first year. Reading aloud should, in general, follow rather than precede translation.
- 4. Composition. Stein's German Exercises, about half of Part i.
- 5. Conversation in connection with 1 and 4: practice in interpreting and constructing simple sentences.

SECOND YEAR.

- 1. Reading. About 260 pages. [Teachers should insist that all English versions be given in idiomatic English.]
- I. Brandt's German Reader, 75 pages, selected from Parts iv., v., and vi. II. Bernhardt's Im Zwielicht (Baumbach), Vol. i. III. Van Daell's Träumereien (Leander), to be read at sight.
- 2. Composition. Stein's German Exercises, about half of Part i.

- 3. Grammar. Collar's German Lessons (Eysenbach), lessons 15-31, omitting, if necessary, three-quarters of the exercises; the principal parts of at least 100 strong or irregular verbs.
- 4. Pronunciation. Teachers should be very careful not to let pupils form bad habits of pronunciation. At least a part of the reading aloud should consist of the repetition, by the scholars, of sentences just read by the instructor.
- 5. Conversation based on 1 and 2.—Aside from set exercises, the German language should be used as often as possible in the class-room.

THIRD YEAR.

- 1. Reading. About 260 pages. [Teachers should insist that all English versions be given in good English.] I. Either Bernhardt's Im Zwielicht (Baumbach), Vol. ii., or 100 pages selected from Brandt's German Reader, Parts ii.—vi. II. Either Hermann und Dorothea (Gethe), or 60 pages selected from Whitney's German Reader, between p. 29 and p. 199. III. Schiller: either Wilhelm Tell or Maria Stuart.
- 2. Composition. Stein's German Exercises, Part ii., 25 exercises.
- 3. Conversation based on 1 and 2.—The German language should be used as much as possible in the classroom.
- 4. Grammar. All of Sheldon's Short German Grammar.

FOURTH YEAR.

- 1. Reading. About 360 pages. I. Der zerbrochene Krug (Zschokke). II. Die Harzreise (Heine). III. The books used in the third year.
 - 2. Conversation based on 1 and 3.—The German

language should be used as much as possible in the class-room.

3. Composition. — Stein's German Exercises, Part ii., 25 exercises.

LATIN SCHOOLS.

FRENCH. - FIRST YEAR.

- 1. Reading. Super's French Reader, 150 pages. It is suggested that from the very beginning as much time as possible be devoted to reading at sight.
- 2. Pronunciation. Practice in reading aloud. A part of this exercise should consist of the repetition, by the scholars, of sentences just read by the instructor. Teachers are requested to be very careful not to let their pupils form bad habits of pronunciation.
- 3. Grammar. The regular and at least 20 irregular verbs. Keetels' *Elementary French Grammar*, from 18 to 34 lessons. It is suggested that French-English exercises be recited with the books closed, the pupil repeating the French sentence after the teacher, and then turning it into English.

SECOND YEAR.

1. Reading. — About 250 pages. — [Teachers are requested to insist upon the use of idiomatic English in the translations. It is suggested that as much time as possible be given to reading at sight.] — I. L'abbé Constantin (Halévy); or Colomba (Mérimée); or Madame Thérèse (Erckmann-Chatrian).—II. La Belle-Nivernaise (Daudet;) or Abeille (France); or Mlle. de la Seiglière (Sandeau); or seven stories by Daudet from Jenkins' Le siège de Berlin and Price's Choix d'extraits de Daudet.

- 2. Grammar. All the commoner irregular verbs. Keetels' *Elementary French Grammar*, from 34 to 46 lessons (including those studied during the first year). It is suggested that the French-English exercises be recited with the books closed.
 - 3. Pronunciation. Practice in reading aloud.

THIRD YEAR.

- 1. Reading. About 300 pages. I. La bibliothèque de mon oncle (Töpffer); or Madame Thérèse (Erckmann-Chatrian); or La poudre aux yeux (Labiche and Martin) and either Colomba (Mérimée) or L'abbé Constantin (Halévy). II. La mère de la marquise (About); or La Mare au Diable (Sand); or Le bourgeois gentilhomme (Molière); or Un philosophe sous les toits (Souvestre); or Fontaine's Historiettes modernes, Vol. i.
- 2. Grammar. Either systematic practice in irregular verbs, or lessons 47-52 in Keetels' *Elementary French Grammar*. Reviews, if necessary.
 - 3. Pronunciation. Practice in reading aloud.

C. H. GRANDGENT,

Director.



SCHOOL DOCUMENT NO. 14-1891.

BOSTON PUBLIC SCHOOLS.

COURSE OF STUDY

FOR THE

HIGH SCHOOLS.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

IN SCHOOL COMMITTEE, BOSTON, June 10, 1890.

Ordered, That the Committee on Revision of the Courses of Study be authorized to report the revised courses of study in print.

Attest:

PHINEAS BATES,

Secretary.

In School Committee, Boston, June 23, 1891. Adopted.

Attest:

PHINEAS BATES,

Secretary.

COURSE OF STUDY

FOR THE

HIGH SCHOOLS.

1891.



Introduction.

The High Schools are to be in session five hours a day for five days of the week. Of the five hours a day, a quarter of an hour is to be given to the opening exercises, and half an hour to recesses. The average length of an "hour" for class exercises or for study is about fifty minutes. Of the twenty-five school "hours" in a week, twenty hours are to be given, in each of the first three years, to class exercises, and five hours—one each day—to study.

Pupils will not be required to make preparation for more than fifteen lessons or exercises a week, nor to study out of school more than twelve hours a week.

If pupils are unable, from ill-health or for other reasons, to pursue in full the regular course of study, or if the interests of pupils require them to omit a part of the course, the principal may allow such pupils to pursue partial courses of study, and to continue them from year to year; but diplomas of graduation cannot be awarded pupils until they have completed the regular course of study.

Diplomas are granted in accordance with the following regulation of the School Committee: "Pupils who have completed the three years' course to the satisfaction of the Committee on Examinations shall be entitled to a diploma; and those who have completed the advanced [or fourth-year] course, to an additional diploma, on the same condition."

MORAL TRAINING.

A part of the time assigned to the opening exercises will be used in giving instruction in morals and manners. Teachers will, at all times, "exert their best endeavors to impress on the minds of children and youth committed to their care and instruction, the principles of piety and justice, and a sacred regard to truth; love of their country, humanity, and universal benevolence; sobriety, industry, and frugality; chastity, moderation, and temperance; and those other virtues which are the ornament of human society, and the basis upon which a republican constitution is founded."— Extract from the General Statutes of Massachusetts.

PHYSICAL TRAINING.

Physical training will be regularly given at school by means of gymnastics and military drill; and no class or pupil will be allowed, without good reason, to omit these physical exercises. Moreover, teachers will guard the health of their pupils, or, better, will instruct them how to observe the laws of life and health. Sound advice with regard to diet, ventilation, exercise, rest, dress, and regular hours will be given; and the requirements of the following law of this State will be observed: "Physiology and Hygiene, which, in both divisions of the subject, shall include special instruction as to the effects of alcoholic drinks, stimulants, and narcotics on the human system, shall be taught as a regular branch of study to all pupils in all schools supported wholly or in part by public money, except special schools maintained solely for instruction in particular branches."

First Year.

ESGLISH: Four hours a week till March 1; one hour a week after March 1. English Language and Literature.

HISTORY: Two hours a week. Ancient History.

Foreign Language (See Note 1): Either four or five hours a week. French, German, or Latin.

MATHEMATICS: Either five or four hours a week till March 1: either four or three hours a week after March 1. Algebra, with generalizations of Arithmetic.

Science: Four hours a week after March 1. Botany. Drawing: Two hours a week.

Music (See Note 2): One hour a week. Singing.

Physical Training: Two hours a week. Gymnastics for girls. Gymnastics and Military Drill for boys.

Note 1: The choice of a study must be subject to the approval of the principal.

Note 2: Pupils excused from singing must do additional work in some other study of the regular course.

Second Year.

English: Three hours a week. English Language and Literature.

HISTORY: Two hours a week. Mediæval History. Modern History begun.

Foreign Language: Either three or four hours a week. French, German, or Latin continued.

MATHEMATICS: Either four or three hours a week. Algebra, with generalizations of and applications to Arithmetic — completed. Plane Geometry.

SCIENCE (See Note 1): Three hours a week. Zoölogy; followed by a short course in Physiology and Hygiene.

Drawing: Two hours a week.

Music (See Note 2): One hour a week. Singing.

PHYSICAL TRAINING: Two hours a week. Gymnastics for girls. Gymnastics and Military Drill for boys.

ELECTIVES (See Note 3): Elective substitute for Zoölogy: Book-keeping including Commercial Arithmetic.

Note 1: Pupils intending to enter the Normal School are advised to study Zo\"ology.

NOTE 2: Pupils excused from singing must do additional work in some other study of the regular course.

NOTE 3: The choice of a study must be subject to the approval of the principal.

Third Year.

English: Three hours a week. English Language and Literature.

HISTORY AND CIVIL GOVERNMENT: Three hours a week. Modern History. Civil Government.

Foreign Language (See Note 1): Three hours a week. Either (a) French, German, or Latin continued, or (b) French or German begun.

Mathematics: Two hours a week. Plane Geometry completed. Review of Arithmetic and Algebra.

SCIENCE: Six hours a week. Physics, three hours. Chemistry, three hours.

Music (See Note 2): One hour a week. Singing.

Physical Training: Two hours a week. Gymnastics for girls. Gymnastics and Military Drill for boys.

ELECTIVES (See Note 1): Elective substitute for Foreign Language: Phonography. Elective substitute for Chemistry: Drawing.

NOTE 1: The choice of a study, and changes in the choice of a foreign language, must be subject to the approval of the principal.

Note 2: Pupils excused from singing must do additional work in some other study of the regular course.

Fourth Year.

REQUIRED ENGLISH: Three hours a week. Rhetoric and Composition.

Music (See Note 1): One hour a week. Singing.

Gymnastics: Two hours a week.

ELECTIVES (See Note 2): Twelve hours a week. English Literature; History; French, German, Latin; Advanced Algebra, Solid Geometry, Plane Trigonometry with applications to Surveying and Navigation, Analytic Geometry; Physics, Chemistry, Astronomy (See Note 3); Drawing; Phonography.

Note 1: Pupils excused from singing must do additional work in some other study of the regular course.

NOTE 2: The choice of studies must be subject to the approval of the principal.

Note 3: Pupils intending to enter the Normal School are advised to study Astronomy.

SCHOOL DOCUMENT NO. 15-1891.

BOSTON PUBLIC SCHOOLS.

COURSE OF STUDY

FOR THE

LATIN SCHOOLS.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

IN SCHOOL COMMITTEE, BOSTON, June 10, 1890.

Ordered, That the Committee on the Revision of the Courses of Study be authorized to report the revised courses of study in print.

Attest:

PHINEAS BATES,

Secretary.

In School Committee, Boston, June 23, 1891. Adopted.

 $\Lambda ttest:$

PHINEAS BATES, Secretary.

COURSE OF STUDY

FOR THE

LATIN SCHOOLS.

1891.



Introduction.

The Latin Schools are to be in session five hours a day for five days of the week. Of the five hours a day, a quarter of an hour is assigned to the opening exercises, and half an hour to recesses. The average length of an "hour" for class exercises or for study is about fifty minutes. Of the twenty-five school "hours" in a week, twenty hours are to be given to class exercises, and five hours — one each day — to study.

Pupils will not be required to make preparation for more than fifteen lessons or exercises a week. Members of the three lower classes will be required to study out of school not more than ten hours a week; and members of the three upper classes, not more than twelve hours a week.

Pupils may, for good and sufficient reasons, be allowed by the principal to spend more than six years in completing the regular course of study, and, with his consent, may omit one or more studies; but diplomas of graduation cannot be awarded pupils until they have completed the regular course of study.

Diplomas are granted in accordance with the following regulation of the School Committee: "The Board of Supervisors shall examine the graduating classes each year; and the standard of examination shall be that of admission to colleges of the highest grade. Pupils who have completed the course of study, to the satisfaction of the Committee on Examinations, shall be entitled to a diploma."

MORAL TRAINING.

A part of the time assigned to the opening exercises will be used in giving instruction in morals and manners. Teachers will at all times "exert their best endeavors to impress on the minds of children and youth committed to their care and instruction, the principles of piety and justice, and a sacred regard to truth; love of their country, humanity, and universal benevolence; sobriety, industry, and frugality; chastity, moderation, and temperance; and those other virtues which are the ornament of human society, and the basis upon which a republican constitution is founded."—Extract from the General Statutes of Massachusetts.

PHYSICAL TRAINING.

Physical training will be regularly given at school by means of gymnastics and military drill; and no class or pupil will be allowed, without good reason, to omit these physical exercises. Moreover, teachers will guard the health of their pupils, or, better, will instruct them how to observe the laws of life and health. Sound advice with regard to diet, ventilation, exercise, rest, dress, and regular hours will be given; and the requirements of the following law of this State will be observed: "Physiology and Hygiene, which, in both divisions of the subject, shall include special instruction as to the effects of alcoholic drinks, stimulants, and narcotics on the human system, shall be taught as a regular branch of study to all pupils in all schools supported wholly or in part by public money, except special schools, maintained solely for instruction in particular branches."

Class VI.

English: Six hours a week. 1. Reading aloud or silently (a) Hawthorne's Wonder Book and True Stories; (b) either Tom Brown's School Days at Rugby or Charles and Mary Lamb's Tales from Shakespeare; (c) some lives of persons famous in American history and descriptions of its important events. 2. (a) Reading aloud, committing to memory, and reciting prose selections from standard authors and some of Whittier's and Longfellow's poems. (b) Exercises for cultivating clear and distinct utterance in speaking, reading, and reciting. 3. (a) Oral and written reproductions or abstracts of the history and of other reading lessons. (b) Oral and written descriptions of visits to historic places, buildings, and monuments in and about Boston. (c) Conversations and written exercises on good morals and good manners. 4. (a) The analysis of sentences; the classification of words as parts of speech; changes in the forms of words; and principles of syntax. (b) Penmanship; and exercises in copying, in writing from dictation, and in reproduction for the purpose of training in correct spelling, punctuation, and forms of written compositions.

Note 1: Teachers should recommend for home reading suitable books that may be taken from the school or from the Public Library. Pieces should be committed to memory and recited, not chiefly for the purpose of "declamation,"—however valuable that may be,—but for the purpose of filling the mind with good thoughts and beautiful and noble sentiments, and of expressing these in a clear and distinct voice and in a simple and suitable manner.

LATIN: Five hours a week. 1. Regular forms, with simple exercises illustrating their use. 2. (a) Oral and written translation of easy Latin into English. (b) Unprepared translation of easy Latin with the help of the teacher. 3. (a) Reading alond, copying, and writing from dictation. Latin simple in construction and composed of words familiar to the pupils: (b) Simple oral and written translation of English into Latin.

Note 2: Beginners in Latin should hear much easy Latin read and translated and should read aloud the same or similar passages and translate them into English so that Latin words, the changes in their forms, and the force of these changes may become familiar. A few Latin words should be added, each day, to the vocabulary of the pupils.

HISTORY: See English. (a) Reading lives of persons famous in American history and descriptions of its important events; and making oral and written reproductions or abstracts of the same. (b) Oral and written descriptions of visits to historic places, buildings, and monuments in and about Boston.

Note 3: The reading of history lessons should be accompanied and followed by collateral reading and by conversations upon prominent and interesting events. There should be, of course, no attempt to load the memory with unimportant facts and dates. The main purposes should be (1) to train the pupils to grasp mentally the leading events in their order, and (2) to induce or aronse an interest in historical reading.

GEOGRAPHY: Two hours a week. Physical and political geography of (a) the United States; (b) the countries of Europe; (c) the remaining countries of North America.

ELEMENTARY SCIENCE: One-half hour a week. Physiology and hygiene.

NOTE 4: See, under Physical Training on page 6, the requirements of the law as to teaching "the effects of alcoholic drinks, stimulants, and narcotics on the human system."

NOTE 5: The time in the year for beginning or closing a study may be determined by the principal; but the class must give to each study the aggregate time prescribed.

Mathematics: Four and one-half hours a week.

1. Arithmetic: Four hours a week. Oral exercises with simple numbers, arithmetic at sight, and written arithmetic: (a) Reviews. (See the Grammar-school Course of Study in Arithmetic for Classes VI., V., IV.) (b) The metric system. (c) Percentage, and its applications to commission, profit and loss, and other simple subjects, and to simple interest.

2. Objective geometry: One-half hour a week.

NOTE 6: Pupils are to observe, measure, and represent solids, surfaces, and lines, and to infer, express, and use simple geometrical truths.

Physical Training and Singing: Two hours a week. Gymnastics and singing for girls. Gymnastics and military drill for boys.

Class V.

English: Six hours a week. 1. Reading aloud or silently (a) Hawthorne's Tanglewood Tales; (b) either Kingsley's Greek Heroes or selections from Scott's Tales of a Grandfather; (c) some lives of persons famous in English history and descriptions of its important events. 2. (a) Reading aloud, committing to memory, and reciting prose selections from standard authors, and some of Holmes's, Bryant's, and parts of Scott's poems. (b) Exercises for cultivating clear, distinct, forcible, and expressive utterance in speaking, reading, and reciting. 3. (a) Oral and written reproductions or abstracts of the history and of other reading lessons. (b) Conversations and written exercises on good morals and good manners. 4. (a) Analysis of sentences; inflections of words and principles of syntax. (b) Penmanship; exercises in writing from dictation and in reproduction for the purpose of training in spelling, punctuation, and forms of written composition. (See Note 1, under Class VI.)

LATIN: Five hours a week. 1. Forms and constructions, with exercises thereon. 2. Oral and, occasionally, written translation (a) of easy Latin and (b) at least of Books I., II., and III. of Cæsar's Gallic War. (e) Unprepared translation of easy Latin. 3. (a) Reading aloud, copying, and writing from dictation, familiar passages from Cæsar. (b) Repeating aloud or writing passages from Cæsar that have been carefully studied and committed to memory. 4. English into Latin, including simple oral and written exercises based upon passages from Cæsar. (See Note 2, under Class VI.)

HISTORY: See English. Reading lives of persons famous in English history and descriptions of its important events; and making oral and written reproductions or abstracts of the same. (See Note 3, under Class VI.)

Geography: Two and one-half hours a week. Physical and political geography, with map-drawing, of (a) the countries of South America; (b) the West Indies, etc.; (c) the countries of Asia and of Africa; (d) Australia, Malaysia, and other islands of the Pacific. (e) Reviews.

ELEMENTARY SCIENCE: One-half hour a week. Physiology and hygiene; then botany, inductively studied. (See Note 4, under Class VI.)

Note: The time in the year for beginning or closing a study may be determined by the principal; but the class must give to each study the aggregate time prescribed.

MATHEMATICS: Four hours a week. 1. Arithmetic: Three and one-half hours a week. Oral exercises with simple numbers, arithmetic at sight, and written arithmetic: (a) Application of the principles of percentage to bank discount, partial payments, and compound interest. (b) Compound numbers, with simple practical problems. (c) Ratio and proportion. (d) Powers; square root and its common applications; cube root with simple practical problems. 2. Geometry: One-half hour a week. Objective geometry, including the mensuration of the parallelogram, triangle, trapezoid, trapezium, circle, and any other plane figure divisible into triangles; of the right prism, pyramid, cylinder, and cone; and of the sphere. (See Note 6, under Class VI.)

Physical Training and Singing: Two hours a week. Gymnastics and singing for girls. Gymnastics and military drill for boys.

Class IV.

English: Five hours a week. 1. Reading aloud or silently (a) Irving's Sketch Book; (b) Church's Stories from Homer; and (c) Plutarch's Lives of Famous Greeks. (d) Reading descriptions of and studying the great events in the history of Ancient Greece. (e) Reading astronomical and physical geography. 2. (a) Reading aloud, committing to memory, and reciting prose selections from standard authors, and some of Lowell's, Gray's, and parts of Goldsmith's poems. (b) Exercises for cultivating clear, distinct, forcible, and expressive utterance in speaking, reading, and reciting. 3. (a) Oral and written reproductions or abstracts of lectures and of historical, geographical, and other readings. (b) Compositions — chiefly narratives and descriptions. (c) Applications of the principles of good English to the correction of mistakes made by the pupils in speaking and writing.

NOTE 1: The pupils are now old enough to begin to appreciate literature as such. The purpose and spirit of the author and the merits of his thought and style should be pointed out. His defects should be but lightly touched.

French or German: Three and one-half hours a week. 1. (a) Translating into English, reading aloud, and, immediately after the teacher, repeating aloud, easy French or German. (b) Simple exercises in pronunciation and conversation based on this French or German. (c) Unprepared translation of easy French or German into English. 2. (a) Oral and written practice in the forms and use of nouns, pronouns, adjectives, articles.

regular verbs, and at least twenty irregular verbs. 3. Simple oral and written translations of English into French or German.

Note 2: Pupils should, with the help of the teacher, read, at the outset, French or German, and translate it into English. They should be trained to observe forms and idioms and the force of these; and thus should acquire some real knowledge of the foreign language before they begin to study its formal grammar.

LATIN: Five hours a week. 1. Oral and, occasionally, written translation, at least, (a) of Books IV. and V. of Cæsar's Gallic War; (b) of 1000 lines of Ovid; and (c) of Book I. and a part of Book II. of the Æneid. (d) Unprepared translation of average passages from Cæsar and of the easier passages from Ovid. 2. (a) Writing from dictation, and committing to memory, passages from Cæsar. (b) Reading metrically and committing to memory passages from Ovid. 3. English into Latin, including oral and written exercises based upon passages from Cæsar.

Note 3: Pupils should be induced to translate much Latin into English. To this end the teacher should occasionally translate and comment upon the more difficult passages; should cause the brighter pupils to translate at sight average passages, and the average pupils to translate at sight the easier passages, and should skilfully remove the difficulties that obstruct the way of the duller pupils.

Note 4: In March, the study of Greek may be begun; but the time it takes from other studies of Class IV. should be restored to the same studies of Class III.

HISTORY: See English. Reading Plutarch's Lives of Famous Greeks; reading descriptions of and studying the great events in the history of Ancient Greece; and making oral and written reproductions or abstracts of the same.

Note 5: Pupils in Class IV. are old enough to begin to appreciate causes and consequences of historical events, and to form clear conceptions of the life of the people whose history they are reading. Teachers should use statuary, paintings, engravings, photographs, and other available historic illustrations (at the Art Museum and elsewhere), and should read to the pupils, or cause them to read, such extracts from standard historical writers as distinctly and vividly portray famous men and events.

ELEMENTARY SCIENCE: One-half hour a week. Astronomical and physical geography; then botany, inductively studied.

NOTE 6: The time in the year for beginning or closing a study may be determined by the principal; but the class must give to each study the aggregate time prescribed.

MATHEMATICS: Four hours a week. Algebra, including the generalizations of arithmetic.

Physical Training and Singing: Two hours a week. Gymnastics and singing for girls. Gymnastics and military drill for boys.

Class III.

English: Four hours a week. 1. Reading aloud or silently (a) Addison's papers in the Spectator; (b) one of Scott's novels; (c) Plutarch's Lives of Famous Romans; and (d) Macaulay's Lays of Ancient Rome. (e) Reading descriptions of and studying the great events in the history of Ancient Rome. 2. (a) Reading aloud, committing to memory, and reciting prose selections from standard authors, and some of Tennyson's, Emerson's, and Wordsworth's poems. (b) Exercises for cultivating clear, distinct, forcible, and expressive utterance in speaking, reading, and reciting. 3. (a) Oral and written reproductions or abstracts of lectures and of the history and other reading lessons. (b) Compositions. (c) Some study of English as used by the best authors; and exercises for training pupils to correct their own mistakes in speaking and writing. (See Note 1, under Class IV.)

FRENCH OR GERMAN: Two hours a week. 1. (a) Reading aloud and translating into English, French or German suited to the progress of the class. (b) Simple exercises in conversation based on this French or German. (c) Unprepared translations of easy French or German into English. 2. Forms reviewed and irregular forms studied, with exercises thereon. 3. (a) Writing from dictation or from memory French or German, containing only familiar words and forms and common constructions. (b) Simple oral and written translations of English into French or German, including exercises based upon passages already translated into English.

Note 1: See Note 2, under Class IV. Most of the time assigned this year to French or German, should be used by the pupils in reading the foreign language and translating it into English. Occasionally, there should be practice in getting thoughts directly from the French or German without translating it into English.

LATIN: Four hours a week. 1. Oral and, occasionally, written translations (a) of the remainder of Book II., and the whole of Books III., IV., and V., of the Æneid; (b) of Sallust's Catiline; and (c) of, at least, one of Nepos's Lives. (d) Unprepared translation of average passages from Cæsar and of the easier passages from Sallust, Nepos, and Vergil. 2. (a) Writing from dictation, and committing to memory, passages from Sallust or Nepos. (b) Reading metrically, and committing to memory, passages from Vergil. 3. English into Latin, including oral and written exercises based upon passages from Cæsar, Sallust, or Nepos. (See Note 3, under Class IV.)

GREEK: Five hours a week. 1. Forms, with simple exercises illustrating their use. 2. (a) Oral and written translation of easy Greek into English. (b) Oral translation of, at least, a part of Book I. of the Anabasis. (c) Unprepared translation of easy Greek, with the help of the teacher. 3. (a) Reading aloud, copying, and writing from dictation Greek simple in construction and composed of words familiar to the pupils. (b) Simple oral and written translation of English into Greek, including exercises based upon passages from Book I. of the Anabasis.

Note 2: That pupils may, early in the course, acquire some knowledge of the Greek language as a foundation for their study of its formal grammar, they should read aloud and should hear the teacher read much connected Greek and should, with his help, translate it into English. They would thus gradually learn, through ear and eye, changes in the forms of words and, through the understanding, the force of these changes; and, at the same time, interested in the connected narrative, would gain daily in the power of translating readily Greek into English.

HISTORY: See English. Reading Plutarch's Lives of Famous Romans, and Macaulay's Lays of Ancient Rome; reading descriptions of and studying the great events in the history of Ancient Rome; and making oral and written reproductions or abstracts of the same. (See Note 5, under Class IV.)

Mathematics: Three hours a week. Algebra; review of arithmetic; applications of algebra to arithmetic.

Note 3: With the aid of algebra, Class III. can thoroughly study some arithmetical subjects — e.g., powers and roots — that are only lightly touched by Class V. Near the close of this school-year, the final examination in arithmetic should be given.

Physical Training and Singing: Two hours a week. Gymnastics and singing for girls. Gymnastics and military drill for boys.

Class II.

ENGLISH: Four hours a week. 1. Reading aloud or silently and studying (a) one play of Shakespeare; and (b) a part of the English literature required for admission to college. (c) Reading descriptions of and studying the great events in the history of ancient Greece and Rome. 2. (a) Committing to memory and reciting selections from standard authors of prose and poetry. (b) Exercises for cultivating correct and expressive utterance. 3. (a) Oral and written reproductions or abstracts of lectures and of the history and other reading lessons. (b) Compositions. (c) Some critical study of standard English prose as to correctness, perspicuity, and force; and exercises for training pupils to correct their own mistakes in speaking and writing.

Note 1: The course of study in English literature for Classes I. and II. is largely determined by the requirements for admission to New England colleges. These requirements in English literature for the years 1892, 1893, and 1894 are given on the next page. Of course, the authors there mentioned should be mainly studied for their literature. If the pupils will but read with a genuine interest and with a fair appreciation of thought and sentiment, not only will their standard of reading and thinking be raised and their literary taste improved, but also their ability to use good English will be in-Merits rather than defects in the exercises used for improving the style of expression should be emphasized. Indeed, if pupils do not violate the principles of good use, they will not need to correct the solecisms and barbarisms of others; and if, on the other hand, they use bad English, it will be sufficient for them to correct their own mistakes and blunders.

| 1892. | 1893. | 1804. Shakespeare's Julius Cæ- | | |
|--|--|---|--|--|
| Shakespeare's Julius Ca- sar. | Shakespeare's Julius Cæ- sar. | | | |
| Shakespeare's As You Like It. | Shakespeare's Twelfth Night. | Shakespeare's Merchant of Venice. | | |
| Scott's Marmion. | Scott's Marmion. | Scott's Lady of the Lake | | |
| Longfellow's Courtship of Miles Standish. | Longfellow's Courtship of Miles Standish. | Longfellow's Courtship of Miles Standish. | | |
| Addison's Sir Roger de Coverly Papers. | Addison's Sir Roger de Coverly Papers. | Addison's Sir Roger de Coverly Papers. | | |
| Macaulay's Second Essay on the Earl of Chatham. | Macaulay's Second Essay on the Earl of Chatham. | Macaulay's Second Essay on the Earl of Chatham | | |
| Webster's First Bunker Hill Oration. | Emerson's American Scholar. | Emerson's American Scholar. | | |
| Irving's Alhambra. | Irving's Sketch Book. | Irving's Sketch Book. | | |
| Scott's Talisman. | Scott's Ivanhoe. | Scott's Abbot. | | |
| George Eliot's Scenes from Clerical Life. | Dickens's David Copper- field. | Dickens's David Copper- field. | | |
| Hawthorne's House of the Seven Gables. | | | | |

French or German: Two hours a week. 1. (a) Reading aloud, without translating into English, some easy French or German prose. (b) Conversations based on this French or German. (c) Reproduction of stories or of other simple French or German heard or read by the pupils. 2. (a) Oral and written translations into English of some modern French or German prose and poetry suited to the progress of the class; also, of one or more French or German classics. (b) Unprepared translation of easy and average passages from French or German into English. 3. (a) Study of irregular forms and unfamiliar constructions, with exercises thereon. (b) Translation of English into French, including oral and written exercises based upon passages selected from the authors studied.

Note 2: (1) To translate readily French or German into idiomatic English, and (2) to acquire and appreciate the author's thoughts through reading the foreign language without translating it into English, are the two main objects of its study in the Latin Schools. While accomplishing these objects, the pupils should acquire a correct pronunciation and a familiarity with forms and syntax, and should begin to compose and converse in the foreign language.

LATIN: Four hours a week. 1. Oral and, occasionally, written translations (a) of, at least, three more books of the Æneid and the Eclogues of Vergil; (b) of, at least, four orations of Cicero; and (c) of some of Nepos's Lives. (d) Unprepared translation of average passages from Cæsar and Nepos, and of the easier passages from Vergil and Cicero. 2. (a) Writing from dictation and committing to memory passages from the prose writers studied; and (b) reading metrically and committing to memory passages from Vergil. 3. English into Latin, including oral and written exercises based upon passages from Cæsar, Nepos, or Cicero. (See Note 3, under Class IV.)

GREEK: Five hours a week. 1. Forms and idioms, with exercises thereon. 2. (a) Oral and written translations of, at least, Books I.—IV. of the Anabasis or its equivalent. (b) Unprepared translation of simple Attic prose. (c) Reading aloud, writing from dictation, and committing to memory familiar passages from Greek.

3. English into Greek, including oral and written exercises based upon passages from Xenophon. (See Note 2, under Class III.)

HISTORY: See English. Reading descriptions of and studying the great events in the history of Ancient Greece and Rome; and making oral and written reproductions or abstracts of the same. (See Note 5, under Class IV.)

Mathematics: Three hours a week. Algebra through quadratic equations. Plane geometry, begun.

Physical Training and Singing: Two hours a week. Gymnastics and singing for girls. Gymnastics and military drill for boys.

Class I.

ENGLISH: Two hours a week. 1. (a) Reading aloud or silently the English literature required for admission to college. (b) Oral and written abstracts and interpretations of the same. 2. (a) Committing to memory and reciting selections from standard authors of prose and poetry. (b) Exercises for cultivating correct and expressive utterance. 3. (a) Compositions. (b) Some critical study of standard English prose as to correctness, propriety, perspicuity, and force; and exercises for training pupils to correct their own mistakes in speaking and writing. (See Note 1, under Class II.)

LATIN: Four hours a week. 1. Prepared and unprepared translations, oral and written, from Vergil and Cicero. 2. (a) Writing from dictation and committing to memory passages from Cicero; and (b) reading metrically and committing to memory passages from Vergil. 3. English into Latin, including oral and written exercises based upon passages from Nepos and Cicero. (See Note 3, under Class IV.)

NOTE 1: The productions of Latin and Greek authors should now be read and interpreted as literature. However valuable the study of Latin and Greek grammar may be made, it should be kept strictly subordinated to the study of the Latin and Greek literature read.

GREEK: Four and one-half hours a week. 1. Either translations from Homer, including unprepared translations of average and easier passages; or translations from both Homer and Herodotus, including unprepared

translations of the easier passages. 2. Reading metrically and committing to memory passages from Homer. 3. English into Greek, including oral and written exercises based upon passages from Xenophon. (See Note 1, under Latin.)

ELEMENTARY SCIENCE: Three and one-half hours a week. Physics, studied inductively and experimentally.

NOTE 2: The time in the year for beginning and closing a study may be determined by the principal; but the class must give to each study the aggregate time prescribed.

Mathematics: Four hours a week. Plane geometry, completed.

NOTE 3: A part of the regular work in geometry should be original demonstrations of theorems and applications of geometrical truths in the solution of problems.

Physical Training and Singing: Two hours a week. Gymnastics and singing for girls. Gymnastics and military drill for boys.

Note 4: To meet the special needs of some pupils, they will be allowed—if the circumstances of the school permit and the head-master consent—(a) to substitute the history of the United States and of England for the history of Greece and of Rome; (b) to substitute solid geometry (or the elements of analytic geometry, or advanced algebra, or logarithms and plane trigonometry with its applications to surveying and navigation), for Greek composition; (c) to substitute advanced French, or advanced physics, or advanced mathematics, for advanced Greek; (d) to substitute elementary German and solid geometry, or any other of the branches of mathematics mentioned in (b), for advanced Greek; and (e) to "anticipate" studies of the Freshman year.



SCHOOL DOCUMENT NO. 15-1891.

REPORT

OF THE

COMMITTEE ON MANUAL TRAINING SCHOOLS.

SEPTEMBER, 1891.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

In School Committee, Boston, September 22, 1891.

Ordered, That one thousand copies of the report of the Committee on Manual Training Schools be printed.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

In School Committee, Boston, Sept. 22, 1891.

The Committee on Manual Training feel that the time has now come to recommend some definite policy with regard to the various branches of manual training which have been adopted to some extent in our schools. At the very beginning of this report, we ought to record our obligations anew to Mrs. Shaw and Mrs. Hemenway, who at their own expense, and for several years, have so generously furnished the means to train various classes in our different schools, during what may be fairly called the experimental period. The service that these ladies have rendered to the City of Boston in this and various ways is inestimable.

There are several reasons why this matter should now come before us, and some comprehensive plan be adopted for the whole city.

- 1. After long delay, the City Council of this year have appropriated one hundred thousand dollars for a Mechanic Arts High School, which before many months will be ready for occupancy. It is therefore time that we shape the course of study in the elementary schools with this advanced course in mind, so that boys who are intending to follow industrial pursuits shall be trained in the best way to avail themselves of this new opportunity.
- 2. It has been necessary experimentally to try various methods and plans, in order to ascertain what can best be adapted to scholars of various ages, and where the course of

study is already crowded. Out of this testing process we believe that some things have now become very clear, so that we are in a position intelligently to determine what is wisest for our present needs.

3. If a comprehensive plan for all our schools be adopted, there will be required some considerable increase of expense for teachers, equipment, and material. So long as our necessities for new primary and grammar schools continued so large, it seemed to be our duty to press that necessity, keeping down to the minimum every other expense. By the liberality of the City Council during the past three years, there has been appropriated over a million dollars for nearly twenty school-house sites, and new buildings for most of them. Unless there should be in the future another period of neglect, it is not probable that such a large outlay as this in so short a period will be needed again. We can now, therefore, fairly look forward to asking in the immediate future what additional appropriations may be needed for an enlargement of our manual training work.

Commencing now with the lowest grade, we consider first the Kindergartens. While this is under a separate committee, it is, after all, the very alphabet teaching of our whole manual training system. It has been found by experience that a child who has had a year in the kindergarten has had his perceptive faculties so quickened that he has a year's start over the scholar who enters first into the primary school. Our educators are many of them wrestling with the problem how to gain a year. Is not this one of the answers? By means of the kindergarten. But there is more than an intellectual attainment and advantage. There is a moral uplift just at the time when the child is most susceptible to every impression. This kindergarten work, which is really an education of the head, the heart, and the hand, ought to be extended to cover the whole city. While we have now twenty-four kindergartens, there are still some sections unprovided with such schools, and for which provision should be made in the immediate future. This recommendation has the hearty endorsement of the Committee on Kindergartens. It is very significant that Mrs. Alice Freeman Palmer, a few weeks ago, stated in a public address that if the kindergarten system had been in operation in this country fifty years ago, we should not be facing the problems with which this nation is now confronted.

Passing now to the Primary Schools, the teachers of this grade have been for the past few weeks taking lessons in clay modelling, paper cutting, etc., which are the rudiments of manual training. We believe these teachers will in a short time be able so to teach their classes that all the primary children will get good instructions in form, color, and proportion, and some dexterity in the skilful use of their hands. To show the advantage of clay modelling to quicken the intellect, etc., samples of this work done by older boys of the criminal class were shown to us recently - work which is ordinarily done by the child of five or six years of age. The superintendent stated that it was found to be the best possible method to arouse the latent faculties and quicken them to life, and is the best preparation for the book, and the tasks which at first to such boys seem almost beyond their capacities. While we are persuaded that it would be possible to teach some light wood-work to children of this primary grade, yet we do not believe at present that it is wise to attempt it. The course of study is now very full, and we believe the wood-working should be commenced and thoroughly established in the other grades first.

Coming now to the *Grammar Schools*, we believe some distinction should be made, at present at least, between work done by the girls and the boys. Instruction in sewing and cooking has been quite generally introduced into our girls' schools. The value of this seems no longer to be a disputed point. There is an *educational* and a *practical*

value; under the former come neatness, order, the value of time, etc.: under the latter a single illustration will best explain our meaning. Recently the mother of a large family of children died, and the oldest daughter, with the education she had acquired in the public schools, was able to carry on the household, making the clothing for the younger children, and doing also the cooking for the household. she had been graduated a few years ago before these branches were introduced, such a statement could not have been made. We think there should be a provision made by us that every girl should be taught not only plain sewing, but in the upper classes pattern drawing and cutting. also should be taught the art of cooking and so much of chemistry as enters into it, and be fitted thereby to properly provide in the future for their own households. While even this advanced work in sewing can be taught without any very large outlay, this is not true in the case of cooking. It will be necessary, in order to instruct the girls in the grammar schools properly, to provide at an early day for some more schools in cookery. It is not wise to have rooms for this purpose provided in every girls' grammar school, but we ought to provide a sufficient number, so that the schools can be arranged in groups, and that girls shall not be required to travel such long distances as at present. order to accomplish this it will be necessary to provide fifteen in all, arranged somewhat as follows: -

East Boston - One.

For the scholars in the four grammar schools in the First Division.

Charlestown — One.

For the scholars in the five grammar schools in the Second Division.

North Bennet Street - One.

For the scholars in the three grammar schools in the Third Division.

Tennyson Street — One.

For the scholars in the Winthrop and Franklin Schools.

Prince District — One.

For the scholars in that section of the Fourth Division.

Everett District — One.

For the scholars in the Everett and Hyde Schools, Fifth Division.

Comins District — One.

For the scholars in the Comins and Martin Schools, Seventh Division.

Dillaway District — One.

To be located in the old High School building or the Bartlett-street School, and to provide for the scholars in the Dillaway, George Putnam, and Lewis Schools, Seventh Division.

Hugh O'Brien District - One.

To be located in the George-street Primary School, and to provide for the scholars in the Hugh O'Brien and Dearborn Schools, Seventh Division; and Edward Everett School, Ninth Division. The outfit for this school to be that now in the Quincy-street Primary School, which is badly located at present.

South Boston - One.

For the scholars in the four grammar schools in the Sixth Division.

Jamaica Plain — One.

For the scholars in the Bowditch and Lowell Schools, Seventh and Eighth Divisions.

West Roxbury — One.

For the scholars in the Mount Vernon and Charles Sumner Schools, Eighth Division.

Brighton — One.

For the scholars in the Allston and Bennett Schools, Eighth Division.

Dorchester — Two.

For the scholars in the seven schools in the Ninth Division, which include all in that Division except the Edward Everett School, provided for above.

We shall have eight schools of cookery in operation this fall, and it is expected that the new school buildings now in process of erection will provide three more. It will be, therefore, necessary to ask for appropriations in 1892 sufficient to pay for four more, the estimated cost of which will be about \$750 each.

In order that this work shall be done properly, it would seem especially wise to have some one authorized to have it under constant oversight, and to see that the standard in every school is of the highest. We believe that it is absolutely essential that teachers of cooking shall not only be familiar with the science they are to teach, but shall illustrate in their own person the most perfect habits of neatness, and be able to express their thoughts in well-chosen language. Fortunately we have in our employ at present one who is qualified for the position. We would recommend, therefore, that Miss Amabel G. E. Hope be appointed Principal of Cooking Schools, and her salary be fixed at one thousand

dollars (\$1,000) per year. With the aid of an assistant, we think that Miss Hope will be able to care for her school in Tennyson street, as well as have an oversight over the other schools.

As an offset to this education in sewing and cooking which is given to girls, we believe the boys, looking to their future, should have an equal consideration. We would, therefore, recommend that manual training in wood-working for boys be introduced as speedily as possible into all our grammar schools. We would emphasize especially the "all" in the previous sentence. We must be agreed that the children in every section of the city should share alike in the advantages which we believe are to come from this work. To have any favored schools is wrong. Whatever we do, we must first plan alike for all throughout the city; and, secondly, we should insist that this teaching should not only be universal for every school in the grade or grades selected, but that each scholar in these grades shall have the same privileges as are accorded to any other. To take a part of the class only is wrong in principle, and must lead to bad results. If but twenty-five are to be taken from a room, as has often been done in the past, which twenty-five shall it be? Shall they be those at the head of the class? Probably the twenty five poor scholars at the other end are the ones most needing the new work, and who will be the most stimulated by it. But if we take these latter and leave the others, it is a poor compensation to those who have been most faithful in their studies to have others less faithful or less gifted enjoy privileges of which they have been deprived. Starting, then, with these propositions, viz., to teach the whole of every class and all classes of the same grade throughout the city, we come now to the important question as to the best classes to be taken.

In the discussion of this question we would say, first, that we believe the starting-point of all wood-work should be from drawing and not from models. To do this, a child must have some maturity to understand drawings, and to reproduce or translate them into wood. He needs also some muscular strength, which comes with age, to handle tools wisely. We would, therefore, not think of attempting at present wood-working below scholars of the fourth class. It may be said here, by way of parenthesis, in order that the scholars may not lose what they have already attained in the primary schools, that in the sixth and fifth classes of the grammar schools the pupils shall construct with cardboard the various solid forms which they have been modelling in clay. This will give them still greater skill with their hands, and will be of an educational value in fitting them for the wood-working that is to come.

If we had the money at our disposal for rooms, tools, teachers, etc., the ideal plan we think would be to give the boys a four years' course of two hours per week. But it is an ideal plan for the moment, for we cannot obtain the money at once to teach the nearly nine thousand boys in the first to the fourth classes in our schools. And even if we had the money, there are not sufficient teachers yet available to give proper instruction. It will be necessary, for both of these reasons, to move more slowly. It is far wiser to take one class at a time.

The new course of study has provided for the time necessary for manual training, but has not arranged the curriculum in detail. This committee, therefore, beg leave in the appendix of this report to submit two plans for a four years' course. The principles are the same in both, but there are some differences in the practical adaptations. One of the plans is now being tested in the Manual Training School at Jamaica Plain, and the other in that in Warrenton street. Time will show which has the best features, and then portions can be eliminated from each, leaving one harmonious system made from them both.

It has been thought wise to obtain the opinion of the various masters of the city as to which classes should first have this instruction, and the expression has been almost universal in favor of the higher grades. Following substantially the judgment of those who have had the longest experience, the committee are of the unanimous opinion that those first to be instructed shall be the boys of the second class throughout the city. A single teacher can instruct about two hundred and eighty pupils a week or ten classes of twenty-eight each. This will require, for the nearly two thousand boys in this class throughout the city, eight teachers, and the shops arranged somewhat as follows:—

| In East Boston | | | one |
|-----------------|---|--|-------|
| " Charlestown | | | one |
| " Old Boston | | | three |
| " South Boston | | | two |
| "Roxbury . | | | two |
| " Jamaica Plain | • | | one |
| " West Roxbury | | | one |
| " Brighton . | | | one |
| " Dorchester. | | | two |

or fourteen in all. There are five now in operation, and three more will be included in the furnishing of the new buildings now being erected, which will leave but six more to be provided. For the course of study we would recommend the one used in several of our schools the past year, the results of which were seen in the recent Industrial Exhibition. It is substantially the same course as noted in the appendix for the "third year." The boy when he has reached the second class is so old that he cannot spend time upon that which is elementary, but must take up this practical part of the work.

The following year we believe it will be wise to attempt

instruction of the three thousand boys in the *fourth class*. This can be done at much less expense, as benches are not needed, but only boards placed upon the regular desks, and the tools are few and simple. The regular teachers can many of them now give this instruction, and more will be qualified by that time. It may yet be, in the not very distant future, that in the grammar school as in the high school, instruction will be given, in some measure at least, by *subjects* rather than by *classes*. It may be well to note that in at least one grammar school at the present time, the scholars in the lower grades are drawing simple geometric forms, which are then cut out of white wood by the use of a knife only, and the result is most commendable.

Your committee are not so enthusiastic as to believe that the introduction of wood-working into all our schools is to solve all our difficult problems, or in any way be a substitute for the present intellectual studies. The fundamental things, reading, writing, arithmetic, history, geography, which are the basis of all education, must still be taught. But on the other hand, we do believe that a systematic introduction of this kind of work will be a priceless boon in many ways. Many boys, after they have been three years in a primary school and three years in a grammar school, become weary of books and exceedingly restless. To such minds, doing something with the hands is a great relief, and brings back the waning interest. It carries the boy around and over that critical period in his life when he is too old to be a boy, and yet not old enough to feel the restraints and responsibilities of coming manhood.

Such training is not only educational but disciplinary. The boy works off some of his surplus energy at the bench, and is more ready for his book. In a neighboring city, where boys were from the worst homes, and often unruly, the giving of them tools to use, and work to do, changed their whole habit of thought. Manhood was aroused; they

took pride in their tools and their bench, and were stimulated to care in the performance of every task. The experience of the Lyman School at Westborough is valuable upon this point. This school is composed of nearly two hundred boys, sent here, most of them, for petty larceny, and they are constantly changing. In the manual-training shop, where the work of all the boys is together side by side, no boy for nine months has been known to interfere with the work of any other, although the temptation for the poor workman to quietly substitute some better work for his own must at times be very great. In the time that this work has been carried on, only one boy out of four hundred has been obliged to be finally forbidden the opportunity to learn, because of unwillingness to conform to the rules. Even to boys who have taken their first steps in crime, there seems to be a fascination about this work which begins at once to develop in them that which is manly and right, and leads them upwards to better things. And it is not necessary for us to go outside of our own city for illustrations. The change that has been wrought in some of our own boys is most wonderful. Before the tool-work was introduced they were unruly and almost ungovernable, except by severe measures. Now, all is changed: they have learned the law of exactness, the value of time; there is self-reliance and dignity awakened, and even the suggestion that they may, under certain circumstances, be deprived of their tools, is the severest of all punishments. Furthermore, in the two grammar schools where this work has been done under the best conditions, it has been found that as much was done intellectually as before, when the whole time was given to regular studies - a statement that has sometimes been questioned.

Again, we believe it will be true in this city as in others, that the introduction of wood-working in the upper classes will help to retain the boys much longer in school. One of

the most unfortunate things with regard to many of our boys in the past has been, that they are taken from school as soon as the law will permit, and set to work. In many of our schools, not one boy in four that enters finishes his course. These boys therefore enter active life with a poor education, and they are handicapped in the race at the start. Parents will permit the longer course, if the boy is to have the additional advantages which this education will give. As so many of them become mechanics of various kinds, a trained eye and a skilled hand will be of inestimable value.

The practical value of this new education is already seen in one of our schools where wood-working has been introduced. The boys are nearly all from homes of poverty, yet the parents want their children to have a better chance in life than they themselves have had. In the past, they have been taken when young and put to work as errand boys, or into offices of one kind and another. But there is very little opportunity for such boys to advance. As they grow older the pay is not increased, younger boys can do their work at a less price, and they lose their positions. They are too proud to work as common laborers, they will not beg, and they learn to steal, and thus fill our criminal classes. Now, all is changed: boys of this class are beginning to ask about positions as carpenters, masons, tin-smiths, etc., and a new world, which was closed to them before, is now opening.

It must not fail to be noted that the plan proposed by the committee contemplates large classes. We are aware that many contend that in order to give the best success the work must be taught to a few at a time, and an ordinary class in our schools must be divided into several sections. We doubt this position; but even if it were true, it is not practicable in our public schools. The increase of shops and teachers would be so great, and the expense so large, that such a plan could never be carried into practical and general use. We must teach large classes or abandon it altogether.

This general class-instruction is the peculiar feature of American manual training as distinguished from German and Swedish. It is proposed in St. Louis in their advanced work this year to lecture and illustrate to two divisions at once.

But we are persuaded that there are very serious objections to the small classes, educationally considered. When there are but few in the class and the teacher goes from one to another, doing a little here and there, the product is largely that of the teacher. It has been well said that the object might be fairly marked, "Four parts teacher and one part pupil." Those who contend for the small class seem to forget entirely the principle underlying this whole teaching, viz., "that it is boys we are making, and not things."

When there is a large class taught first from the drawing, and then each one compelled to work out this drawing in the wood, they must be attentive in hearing and prompt and exact in execution. The boy that is heedless will make a failure, but the best lessons are sometimes taught through failures. It will teach him to be attentive in the future, and lead finally to self-control and concentration of thought and purpose.

Furthermore, in this class-work, when each pupil is doing his own work, the element of time can be considered far better than when the teacher of the small group is spending so much of the time, first with one, and then another, but of no equal and uniform length. The teacher knows the number of minutes that the average pupil should spend upon a given exercise. A boy who by inattention has only half completed the work which the boys of equal ability have finished is only half as good a boy. This object lesson will teach him a moral truth he needs to learn, viz., that the neglects of to-day can never be fully made up on the morrow. The morrow is crowded full with its own duties.

With regard to the expense, to have benches adjustable

for scholars of different ages, and hard-wood tops, with full sets of tools, and everything in place, we think it is not safe to estimate at less than \$25 each. It is proposed to have twenty-eight benches in the shop, or enough for one-half of a full class. This would make the total expense for benches, tools, etc., per shop, \$700. We shall need two hundred and eighty racks to hold the work, as each boy's work must be kept separate. This would probably cost, all put up, for each shop \$150, or a total for fitting up each shop of \$850. The six more needed would, therefore, cost \$5,100.

For instructors we believe there are teachers now in our schools who have been taking the course of training for two or three years, and who are fully capable of teaching it. We already have four teachers. The four more needed, if the salaries were fixed at \$800 per annum, would make a yearly increased expense of \$3,200.

The other expense, for material used, is very slight, not more than fifty cents per pupil for the year, or about \$1,000. We need, therefore, to ask in the appropriation for 1892 for \$5,100 to fit up the five shops needed, and \$3,200 for the increased instructors. The fourth-year course, when we reach it in 1893, will cost as follows: The frames fitted to the desk and all the tools required will not cost over \$5 per pupil, or, for a full class of fifty-six pupils, \$280. There are fifty-five grammar schools, boy's and girl's, so that the total expense for the furnishing would be about \$15,000. But this would be all the expense, as by this time there will be at least one teacher in every school capable of giving this instruction. The cost for renewals of tools from year to year would not be large. It is a parallel case to free textbooks: the great expense will come at the commencement for the outfit.

We know that it will be a disappointment to many that no provision can be made at once for wood-working for the girls. But, for the reasons first stated, we believe the boys should first be provided for. We hope the day is not far distant, however, when some instruction in wood-working can be given to the girls also. It will be as useful to them educationally, if not practically. If we were allowed to propose a plan for the future for our girls' schools it would be as follows:—

Sewing. — First class in primary, and sixth, fifth, and fourth classes in the grammar school.

Cardboard work, making solids, etc. — Sixth and fifth, grammar.

Light wood-work. — Fourth classes.

In the third class one-half the scholars to study cooking and one-half wood-work at benches.

In the second class the same, the scholars reversed in order.

In the first class cutting garments by pattern. The result in the grammar schools would be, each girl would have three years of sewing, two years of cardboard work, etc., one year of light wood-work, one year of instruction in cooking, one year in wood-working at the bench, and one year of cutting of garments.

There remains only a brief allusion to be made with regard to the Mechanic Arts High School. A plan of study for this school was proposed by Superintendent Seaver in October, 1889, as a supplement to School Document No. 15. The suggestion has been made that it might be wise to allow pupils for that school to take a shorter course in the grammar school in order to enter earlier upon their high-school course. But, after careful consideration, this committee are of the unanimous opinion that such an arrangement would not be wise. A boy who is to make a success in any mechanical vocation needs the mental discipline and furnishing of a full grammar course. To allow boys to enter the high school too young would only be to reduce the grade of that school, and send out boys finally not properly equipped

for industrial success. We therefore believe that the requirements for admission should be a grammar-school diploma, or an examination that shall be equal to it, and that no one shall be allowed to enter at less than thirteen years of age. Every effort will be made by studying the experience of other cities to make this school of the highest order. As the High and Latin schools of this city have always been considered superior, every effort should be used that an equal place shall finally be accorded to this Mechanic-Arts High School.

It is the further hope of this committee that this whole system of manual training into which we hope more largely to enter may prove to be of great value in many ways, and help to solve some of our home problems, by opening up new avenues of industry to many in this city whom we most earnestly desire to help. Certainly, no educational system in the future can ever be considered complete which does not, at the beginning, train the mind to conceive the idea, then the hand, first to translate that idea through the drawing into the outline, and then, by the tool, to put that drawing into form and shape and life.

This whole subject of manual training in its various branches is so very important, and will require such close attention the next few years to prevent mistakes while it is becoming a part of our regular course of study, that we believe it is imperative that there should be a member of the Board of Supervisors to care especially for it. We believe that this should have the attention of the Board at an early day.

One final word as to our responsibility. The whole future of manual training, its success or its failure, depends largely upon the teachers we appoint. They must be of the very best class, well educated in every respect, understanding fully the principles of the new education, with the ability to impart their knowledge to others. They must be able from

their own character and attainments to inspire the noblest purposes in those committed to their care, dignifying the most menial labor at the very start, and lifting the whole study up to the highest plane as worthy of all.

The above report was written in June, but it was thought best not to present it until the opening of the new year. Since then one member of the committee has had an opportunity to learn something of the work in Europe, and the conclusions before reached by us seem to be confirmed by experience in other lands.

In the Allan Glen's Technical School at Glasgow, seventy boys are taught at one time, the instruction being given from a platform raised about five feet above the floor. Samples of the work done in the school are in possession of the com-At Birmingham the manual-training school has accommodations for about three hundred. Boys are not admitted until about twelve years of age, and the course is three and a half hours per week for two years. A full class of fifty is divided into two sections, but if the class has only thirty-five they are all instructed at once. The room we visited had accommodations for at least forty. What is especially true here, as in other parts of England, is the emphasis laid upon the working-drawings, the work being wrought out from them. In one part of the course each of several boys makes one part of a machine, and then the parts are brought together to see if they will fit. They also have the boys enlarge the drawings, and then make the various parts. This school has been such a success, and has become so popular, that they are preparing to build five or six other shops in different sections of the city.

In Manchester it has been demonstrated that the boys who took manual training, and had several less hours per week in the class-room, excelled all others in the regular examinations.

They are following in Birmingham also our plan here for

the school of cookery, by having rooms centrally located in various parts of the city. The sixth one of these has just been finished.

In London also their plan in wood-working is substantially the same as our own, although not so far advanced as ours. There were in the last report six shops in successful operation, and their rule is to instruct thirty boys at a time. The principles laid down read much like those adopted here.

- (1.) The aim must be educational rather than industrial.
- (2.) The scholars must be given an intelligent knowledge of the principles which underlie their work.
- (3.) Working-drawings to scale of every exercise should be made.
- (4.) All bench work should be done to exact measurement, and every piece of wood be correctly lined before being cut or planed.

They give but one lesson per week, and give the whole half-day to it. The teachers are also being instructed in "paper and cardboard work, color work, clay work, and wood work." In 1889 there were 1,422 teachers to take the instruction. Very recently 1,500 other teachers have expressed their desire to be instructed, and arrangements have been made to instruct 900 of them. London seems to be further advanced in providing schools of cookery than in shops for wood-working. "At Lady-day, 1890, there were sixtyeight cookery class-rooms, and others had been authorized." They have in this department three superintendents, sixtyfour permanent and twelve probationary instructors. "All girls who are eleven years of age and over, without regard to standard, and all girls in Standard IV. and upwards who are ten years of age, are required to attend in each year at least twenty out of a course of twenty-two lessons. Four courses of lessons are given during the year, and no more than thirty children may attend any one lesson." One of the chief authorities on this subject is George Ricks, B.Sc., one

of the London School Board Inspectors. He has prepared two illustrated volumes entitled "Hand and Eye Training," which embody their plan. These books are in the possession of this committee, and are at the service of the members of this Board. He declares that "our aim in manual training must be wholly educational; we must arouse interest and quicken intelligence; we must develop and strengthen habits of attention, industry, and perseverance; and we must train the eye to accurate observation, and the hand to dexterity in execution. Drawing must be the foundation of the whole scheme, and working-drawings constructed to scale must be made of every exercise." The course laid out covers three years of at least two hours per week, and the age of children from about eleven to fourteen. It seems only just to say that England is not yet so far advanced as this country in any part of its manual-training work. It is worthy of note also that France, which now has one of the best systems of education in the world, has a three-years' course of woodworking, and the age adopted is from ten to thirteen.

The committee recommend the passage of the following orders.

For the Committee.

SAMUEL B. CAPEN,

Chairman.

Ordered, That Miss Amabel G. E. Hope be appointed Principal of Cooking Schools at a salary of one thousand dollars (\$1,000) per annum, to commence Sept. 9, 1891.

Ordered, That the Committee on Accounts be instructed in preparing its estimates for 1892 to ask for such increased appropriations as may be necessary to carry out the recommendations of this report.

APPENDIX.

PLAN NO. 1.

The first year is arranged with special reference to the drawing, light tool-work only being introduced. By using only very thin wood, the third dimension in both drawing and tool-work is practically eliminated. A board placed upon the regular desks is used, the drawing is made upon the wood, and the piece thus drawn is afterwards cut out by a bracket saw, small plane, and file. drawing and the tool-work are thus brought intimately together in the mind of the pupil, and he is taught at the same time the necessity of using care and accuracy in his drawing. The instruction is given by the teacher to the whole class, from a model at the blackboard. The pupil thus begins at the same time to make an accurate drawing of a piece, and the piece from a drawing. first lesson commences with the cube, and teaches parallel, horizontal, and vertical lines, and proceeds step by step till at the end of the year, out of these pieces thus formed, which may be called the alphabet, are made the needle-book, fish-line winder, a pincushion, sled, corner bracket, silk winder, pencil sharpener, calendar, easel, inkstand, and box for paper and envelopes.

The object of the second year's work is threefold: —

(1) To continue the combined drawing and tool-work; (2) To introduce the third dimension, with its necessary additional views; and (3) To provide tool-work which shall serve as a preliminary training to the joining course. The drawing consists of some new geometrical views, and introduces top, front, and side views. These views are drawn on thin stock as during the first year, are worked out and then used as patterns by which the real piece (in thicker wood) is marked out. The pupil thus makes a working-drawing, and then makes the piece from his own drawing. The articles made this year are a shelf, blotting pad, coat rack, hammer handle, wall pocket, and foot stool.

We come now to the third year, which introduces the more prac-

tical methods of working in both the drawing and tool-work. The two are here separated for a time, the pupil making on paper correct working-drawings of various models illustrating various principles, putting on all dimensions and showing all facts of form needed by the workman for the construction of the piece, and in the tool-work making models in wood, working from correct working-drawings, and using for marking out the work the rule, square, gauge, and bevel, instead of the elementary principles of the second year. They are at length brought together again, the pupil making in the school-room the working-drawings of the models he is afterwards to make in the shop.

This temporary separation of the drawing and tool-work, while not absolutely necessary, is thought advisable, for the following reasons: The subjects are now to be presented to him in a new light—the drawing as a means of expressing to some one not present the facts of form and dimension necessary for the construction of the piece, the tool-work as the expression in wood of the facts some one else has expressed in drawing. Then, too, in drawing on the paper greater nicety is to be used, and the whole subject of putting on dimensions is to be taught, though the pupil by reading the drawings for the two previous years has unconsciously been learning this most important branch. He has been learning how to express himself in drawing by seeing his teacher draw, as he has been learning to express himself verbally by hearing his teacher talk.

The work done during the third year consists of: Exercise for rule, square, gauge, and bevel, sawing, planing, boring, jointing and dowelling, mortising (two joints), chiselling exercise, towel rack, exercise in dovetailing (plain), book rack, and knife box.

The work of the fourth year is a review and continuation of the third year, and is as follows: Sawing, planing, mortising (two joints, keyed joints, and brace mortise), halving, frame bracket with brace mortised in, panel bracket, exercise in mitering, mitered frame, exercise in dovetailing (draw dovetail), and the last piece, a small one-drawer cabinet with dovetailed drawer, panelled sides, mitered base, &c., introducing as many principles already taught as possible.

PLAN NO. 2.

For the fourth class a series of models preparatory to the regular slöjd series has been arranged. The drawing, which should always be preliminary to the work, takes in only one view, and should first be executed on paper and then on the wood. A block of paper and the try-square, rule, and lead pencil used in the bench work are sufficient for the drawing in this course. No surface planing is required, and the pupil has thus only to grasp two dimensions. This series consists of fifteen models, based on carefully graded exercises not so difficult as to prevent the easy attainment of a certain degree of exactness. This is regarded as a very important quality of this course — a standard of excellence is thus established at the outset. "Pretty good" will not do. The problem must, therefore, be strictly within the power of the pupils.

For the three upper classes the regular slöjd series has been arranged. This course is based upon the exercises developed at Nääs, Sweden; that is to say, the exercises have the same progressive order, though represented by different models. But as the models themselves are of minor importance and only an expression of the exercises, the two series are essentially alike. This "American series," as it has been called, has at present thirty-one models, ranging from a wedge to a small cabinet. Like the preparatory course for the fourth class, this is even more closely connected with mechanical drawing, using drawing-board, T square, and triangles. The pupil must make his own working-drawings from the object, and work from the drawing. It should be remembered that as the value of this series of models depends upon the progressive character of the exercises, any capricious use of special models separated from those standing in natural relation to them robs the series of its educational value.

SCHOOL DOCUMENT NO. 16-1891.

SEMI-ANNUAL STATISTICS

OF THE

BOSTON PUBLIC SCHOOLS,

JUNE, 1891.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

Sahaal Committee

SCHOOL CENSUS. - May, 1891.

| Number | of childre | en in Boston between the ages of 5 and 15 | 73,032 |
|--------|-------------|---|--------|
| Number | r attending | g public schools | 55,195 |
| 4.6 | 44 | private schools | 9,779 |

Whole number of different pupils registered in the public schools during the year 1890-91: Boys, 36,218; girls, 32,745: total, 68,963.

EXPENDITURES. - 1890-91.

| Salaries | of | officers | \$60,112 33 |
|----------|----|----------|--------------|
| 66 | " | teachers | 1,364,875 87 |

Incidental Expenses.

| 259,173 83 |
|------------|
| 1,198 25 |
| 263,860 16 |
| 172,523 90 |
| |

| Total expenditures | \$2,121,744 34 |
|--------------------|--------------------|

\$41 200 06

INCOME.

| City Council | " , |
|-------------------------------------|----------------|
| Total income | \$41,417 06 |
| Net expenditures for public schools | \$2,080,327 28 |

S U M M A R Y. June, 1891.

| GENERAL SCHOOLS. | No. Schools. | No. of . Teachers. | Average No. Pupils Belonging. | Average Attendance. | Average Absence. | Per cent. of Attendance. | No. at date. |
|------------------|--------------|-----------------------|-------------------------------------|------------------------|---------------------|-----------------------------|--------------|
| Normal | 1 | 9 | 154 | 146 | 8 | 95. | 149 |
| Latin and High | 10 | 116 | 3,039 | 2,833 | 206 | 93.2 | 2,967 |
| Grammar | 55 | 731 | 30,686 | 27,748 | 2,938 | 87.1 | 29,377 |
| Primary | 470 | 470 | 24,422 | 20,789 | 3,633 | 85. | 24,560 |
| Kindergartens | 31 | 56 | 1,785 | 1,225 | 560 | 68.1 | 1,783 |
| Totals | 567 | 1,382 | 60,086 | 52,741 | 7,345 | 86.1 | 58,836 |

| SPECIAL SCHOOLS. | No. Schools. | No. of Teachers. | Average No. Pupils Belonging. | Average Attendance. | Average Absence. | Per cent. of Attendance. | No. at date. |
|------------------|--------------|---------------------|-------------------------------------|------------------------|---------------------|-----------------------------|--------------|
| Horace Mann | 1 | 11 | 88 | 76 | 12 | | 89 |
| Spectacle Island | 1 | 1 | 15 | 13 | 2 | | 16 |
| Evening High | 1 | 32 | 1,934 | 1,333 | | | |
| Evening | 16 | 126 | 2,986 | 1,662 | | | |
| Evening Drawing | 5 | 24 | 562 | 483 | | | |
| Totals | 24 | 194 | 5,585 | 3,567 | | | |

SCHOOLS AND TEACHERS.

| Clare of a | | TEACHERS. | |
|--------------------------|--------|-----------|--------|
| Schools. | Males. | Females. | Total. |
| Normal School | 2 | 5 | 7 |
| Latin School | 15 | 1 | 15 |
| English High School | 25 | | 25 |
| Girls' High School | 2 | 20 | 22 |
| Firls' Latin School | 1 | 6 | 7 |
| Roxbury High School | 3 | 8 | 11 |
| Oorchester High School | 2 | 6 | 8 |
| Charlestown High School | 2 | 4 | 6 |
| West Roxbury High School | 1 | 3 | 4 |
| Brighton High School | 1 | 2 | 3 |
| East Boston High School | 2 | 3 | 5 |
| Grammar Schools | 104 | 583 | 687 |
| Primary Schools | | 470 | 470 |
| Kindergartens | | 56 | 56 |
| | | | |
| Totals | 160 | 1,166 | 1,326 |

EVENING SCHOOLS. October, 1890—March, 1891.

| Schools. | Number of Sessions. | Whole No. Registered. Average No. Belonging. | | A | AVERAGE TTENDANC | Е. | v. No. Teach- ers, including Principal. | Av. No. Pupils to a Teacher, exc. Principal, per Evening. |
|----------------------|------------------------|--|---------|--------|---------------------|--------|---|--|
| | Nun | Who | Aver Be | Males. | Females. | Total. | Av. No. ers, in Princij | Av. No a to a exc. |
| High | 102 | 2,450 | 1,563 | 643 | 462 | 1,105 | 22 | 27 |
| High, Ch'n Branch | 64 | 457 | 226 | 90 | 49 | 139 | 5 | 31 |
| High, E.B. Branch | 63 | 263 | 145 | 59 | 30 | 89 | 5 | 25 |
| Agassiz School, J.P | 63 | 136 | 82 | 22 | 13 | 35 | 3 | 21 |
| Allston School | 66 | 188 | 86 | 32 | 12 | 44 | 3 | 20 |
| Bigelow School, S.B | 105 | 275 | 265 | 83 | 45 | . 128 | 10 | 15 |
| Comins School, Rox | 104 | 341 | 189 | 121 | 22 | 143 | 10 | 16 |
| Dearborn School, Rox | 104 | 312 | 141 | 53 | 25 | 78 | - 7 | 13 |
| Eliot School | 105 | 425 | 205 | 104 | 43 | 147 | 11 | 14 |
| Franklin School | 105 | 830 | 531 | 154 | 122 | 276 | 18 | 16 |
| Hancock School | 105 | 530 | 332 | 68 | 25 | 93 | 7 | 16 |
| Lincoln School, S.B | 104 | 225 | 144 | 65 | 23 | 88 | 7 | 15 |
| Lyman School, E.B | 104 | 379 | 173 | 83 | 16 | 99 | 8 | 14 |
| Phillips School | 105 | 207 | 108 | 46 | 20 | 66 | 6 | 14 |
| Quincy School | 104 | 307 | 148 | 72 | 35 | 107 | 8 | 15 |
| Sherwin School, Rox | 105 | 160 | 95 | 43 | 23 | 66 | 5 | 17 |
| Warren School, Ch'n | 104 | 299 | 159 | 70 | 23 | 93 | 8 | 14 |
| Warrenton Street | 64 | 192 | 131 | 36 | 28 | 64 | 5 | 17 |
| Wells School | 104 | 592 | 197 | 85 | 50 | 135 | 10 | 15 |
| Totals | 1,780 | 8,568 | 4,920 | 1,929 | 1,066 | 2,995 | 158 | 21.2 |

EVENING DRAWING SCHOOLS.

| Schools. | Number of Sessions. | Whole No. Registered. | tverage No. Belonging. | A | Average TTENDANCE. | | v. No. Teachers, including Principal. | No. Pupils a Teacher, c. Principal. |
|-----------------|------------------------|--------------------------|---------------------------|--------|-----------------------|--------|--|---|
| | Num | Who | Aver Be | Males. | Females. | Total. | Av. ers Pr | Av. N to a exc. |
| Charlestown | 62 | 182 | 126 | 82 | 27 | 109 | 6 | 24 |
| East Boston | 62 | 104 | 82 | 50 | 11 | 61 | 4 | 20 |
| Roxbury | 62 | 206 | 81 | 67 | 8 | 75 | 4 | 25 |
| Tennyson Street | 62 | 270 | 164 | 149 | 0 | 149 | 5 | 37 |
| Warren Avenue | 62 | 184 | 109 | 55 | 34 | 89 | 5 | 22 |
| | | | | | | | | |
| Totals | 310 | 946 | 562 | 403 | 80 | 483 | 24 | 24.2 |

STATISTICS.

SPECIAL TEACHERS.

| Schools. | Males. | Females. | Total. |
|---|--------|----------|--------|
| Horace Mann School | | 11 | 11 |
| Evening Schools | 72 | 86 | 158 |
| Evening Drawing Schools | 19 | 5 | 24 |
| French and German: High Schools | 3 | | 3 |
| Music: High, Grammar, and Primary Schools | 5 | | 5 |
| Illustrative Drawing: Normal School | | 1 | 1 |
| Kindergarten Methods: Normal School | | 1 | 1 |
| Drawing: High and Grammar Schools | 1 | | 1 |
| Physical Training | 2 | | 2 |
| Sewing | | 29 | 29 |
| Chemistry: Girls' High School | | 1 | 1 |
| Laboratory Assistant: Girls' High School | | 1 | 1 |
| Vocal and Physical Culture: Girls' High School | | 1 | 1 |
| Vocal and Physical Culture: Girls' Latin School | | 1 | 1 |
| Military Drill: High Schools | 1 | | 1 |
| Manual Training Schools | 2 | | 2 |
| Cooking Schools | | 7 | 7 |
| Spectacle Island | | 1 | 1 |
| Totals | 105 | 145 | 250 |

NORMAL AND HIGH SCHOOLS.

Semi-Annual Returns to June 30, 1891.

| Schools. | | Average whole Number. | | | Average Attendance. | | | t, of lance. | asters. | | ster. | Junior-Masters. | Principuls. | Assistants. | ABBTH. | nts. |
|--------------------|-------|-----------------------|--------|-------|------------------------|--------|---------------------|-----------------------------|--------------|----------|-------------|-----------------|-------------|-------------|--------|-------------|
| SCHOOLS. | Boys. | Girls. | Total. | Boys. | Girls. | Total. | Average Absence. | Per cent. of Attendance. | Hend-Musters | Masters. | Sub-Master. | Junior- | Asst. P. | First A | Second | Assistants. |
| Normal | | 154 | 154 | | 146 | 146 | 8 | 95. | 1 | | 1 | | | 1 | 4 | |
| Latin | 412 | | 412 | 393 | | 393 | 19 | 95. | 1 | 9 | | 5 | | | | |
| Girls' Latin | | 189 | 189 | | 174 | 174 | 15 | 92. | | 1 | | 1. | | | ı | 6 |
| English High | 735 | | 735 | 695 | | 695 | 40 | 95. | 1 | 8 | | 16 | | | | |
| Girls' High | | 632 | 632 | | 577 | 577 | 55 | 91. | 1 | 1 | | ŀ | 1 | 1 | | 18 |
| Roxbury High | 141 | 232 | 373 | 135 | 217 | 352 | 21 | 94. | 1 | | | 2 | | 1 | | 7 |
| Dorchester High | 96 | 128 | 224 | 88 | 114 | 202 | 22 | 90. | 1 | ŀ | | 1 | | | | 6 |
| Charlestown High | 56 | 102 | 158 | 53 | 94 | 147 | 11 | 93. | 1 | | | 1 | | | | 4 |
| West Roxbury High. | 30 | 65 | 95 | 28 | 60 | 88 | 7 | 93. | | 1 | | 1 | | | | 3 |
| Brighton High | 23 | 55 | 78 | 22 | 51 | 73 | 5 | 93. | | 1 | | | | | | 2 |
| East Boston High | 60 | 83 | 143 | 56 | 76 | 132 | 11 | 93. | | 1 | | | | | | 4 |
| Totals | 1,553 | 1,640 | 3,193 | 1,470 | 1,509 | 2,979 | 214 | 93. | 7 | 22 | 1 | 25 | 1 | 3 | 4 | 50 |

NORMAL, LATIN, AND HIGH SCHOOLS, CLASSIFICATIONS AND AGES, JUNE 30, 1891.

| 21 years and over. | 58 | • | က | 1 | 6 | C1 | : | | : | | : | 13 | 2.3 |
|-----------------------|-------|------|-------------|--------------|------------|-------------|----------------|-----------------|-------------------|---------------|------------------|--------|-------------|
| 20 years. | 46 | 00 | က | 2 | 11 | 9 | 1 | 61 | C1 | : | : | 06 | 2.9 |
| 19 years. | 34 | 15 | 16 | 23 | 55 | 21 | 61 | 1- | က | က | 6 | 188 | 0 9 |
| 18 years. | 10 | 48 | 17 | 91 | 114 | 36 | 18 | 21 | 15 | 1- | 15 | 392 | 12.6 |
| 17 years. | - | 86 | 26 | 190 | 150 | 85 | 52 | 32 | 23 | 30 | 49 | 724 | 23.2 |
| le years. | | 96 | 20 | 190 | 141 | 100 | 19 | 47 | 25 | 22 | 41 | 791 | 25.4 |
| lo years. | | 96 | 25 | 151 | 83 | 84 | 45 | 30 | 14 | œ | 15 | 551 | 17.7 |
| 14 years. | • | 88 | 11 | 41 | 23 | 20 | 10 | က | 1- | 1 | က | 213 | 6.8 |
| 13 years. | : | 9† | 6 | 4 | Т | က | ¢1 | 1 | 1 | : | - | 89 | 2.2 |
| 12 уевтв. | : | 18 | ဗ | : | : | : | : | : | : | : | : | 61 | œ |
| Il years. | : | | Т | : | • | : | • | : | : | : | : | 61 | r. |
| Whole number at date. | 149 | 505 | 173 | 969 | 593 | 357 | 500 | 143 | 06 | 11 | 133 | 3,116 | 100 |
| Out-of-course class. | : | 81 | 20 | : | : | : | : | : | : | : | : | 101 | 3.1 |
| Sixth-year class. | | 42 | 13 | : | : | • | : | : | : | : | : | 55 | 1.8 |
| Fifth-year class. | : | 52 | 31 | : | : | : | : | : | : | : | : | 88 | 2.7 |
| Fourth-year class. | : | 08 | 21 | 19 | 67 | 28 | • | : | • | : | • | 215 | 6.9 |
| Third-year class. | : | 11 | 33 | 160 | 119 | 69 | 75 | 26 | 32 | 10 | 22. | 617 | 19.8 |
| Second-year class. | 57 | 98 | 21 | 238 | 145 | 66 | 62 | 40 | 24 | 21 | 49 | 845 | 27.1 |
| Firet-year class. | 95 | 84 | 58 | 279 | 262 | 191 | 93 | t- t- | 34 | 31 | 62 | 1,203 | 38.6 |
| Schools. | ormal | atin | irls' Latin | inglish High | irls' High | oxbury High | orchester High | harlestown High | Vest Roxbury High | srighton High | hast Boston High | Totals | Percentages |

NORMAL AND HIGH SCHOOLS.

Number of Pupils to a Teacher, excluding Principals.

| Schools. | No. of Reg Teachers. | Average No. of Pupils. | Average No. of Pupils to a Regular Teacher. |
|---|---|---|--|
| Normal Latin Girls' Latin English High Girls' High Roxbury High Dorchester High Charlestown High West Roxbury High Brighton High East Boston High | 6 14 6 24 21 10 7 5 3 2 4 | 154 412 189 735 632 373 224 158 95 78 143 | 25.7 29.3 31.5 30.6 30.1 37.3 32.0 31.6 31.7 39.0 35.8 |
| Totals | 102 | 3,193 | 31.3 |

Graduates, June, 1891.

| Schools. | Regular Course. | Four Years' Course. | Total. |
|-------------------|--------------------|------------------------|--------|
| | | | |
| Latin | 41 | | 41 |
| Girls' Latin | 13 | | 13 |
| English High | 150 | | 150 |
| Girls' High | 107 | 65 | 172 |
| Roxbury High | 69 | 14 | 83 |
| Dorchester High | 47 | | 47 |
| Charlestown High | 22 | | 22 |
| West Roxbury High | 30 | 1 | 30 |
| Brighton High | 19 | | 19 |
| East Boston High | 20 | | 20 |
| Totals | 518 | 79 | 597 |

GRAMMAR SCHOOLS.

Semi-Annual Returns to June 30, 1891.

| Schools. | | rage w | | | Averag tendar | | ge ence. | r cent. of Attendance. | .8. | Sub-Masters. | 1st Assistants. | Assistants. | Assistants. |
|----------------|-------|--------|--------|-------|------------------|--------|---------------------|----------------------------|----------|--------------|-----------------|-------------|-------------|
| | Boys. | Girls. | Total. | Boys. | Girls. | Total. | Average Absence. | Per cent. of Attendance | Masters. | Rop-M | 1st As | | 3d Ass |
| Adams | 249 | 149 | 398 | 226 | 135 | 361 | 37 | 91. | 1 | 1 | 1 | 1 | 7 |
| Agassiz | 397 | | 397 | 364 | | 364 | 33 | 92. | 1 | 1 | 1 | 1 | 5 |
| Allston | 329 | 376 | 705 | 291 | 325 | 616 | 89 | 87. | 1 | 1 | 2 | 2 | 8 |
| Bennett | 241 | 268 | 509 | 228 | 249 | 477 | 32 | 94. | 1 | 1 | 1 | 1 | 7 |
| Bigelow | 695 | | 695 | 655 | | 655 | 40 | 94. | 1 | 2 | 1 | 1 | 10 |
| Bowditch | | 357 | 357 | | 318 | 318 | 39 | 89. | 1 | l. | 1 | 1 | 5 |
| Bowdoin | | 338 | 338 | | 291 | 291 | 47 | 86. | 1 | | 2 | 1 | e |
| Brimmer | 633 | | 633 | 563 | | 563 | 70 | 89. | 1 | 2 | 1 | 1 | 10 |
| Bunker Hill | 337 | 309 | 646 | 311 | 283 | 594 | 52 | 92. | 1 | 1 | 2 | 2 | 9 |
| Chapman | 303 | 270 | 573 | 277 | 246 | 523 | 50 | 91. | 1 | 1 | 2 | 2 | |
| Charles Sumner | 304 | 285 | 589 | 273 | 249 | 522 | 67 | 89. | 1 | 1 | 2 | 1 | : |
| Comins | 270 | 260 | 530 | 248 | 230 | 478 | 52 | 90. | 1 | 1 | 2 | 1 | |
| Dearborn | 354 | 272 | 626 | 320 | 242 | 562 | 64 | 90. | 1 | 1 | 2 | 2 | |
| Dillaway | | 550 | 550 | | 494 | 494 | 56 | 90. | 1 | | 2 | 2 | |
| Dudley | 586 | | 586 | 544 | | 544 | 42 | 92. | 1 | 2 | 1 | 1 | 1 |
| Dwight | 652 | | 652 | 607 | | 607 | 45 | 93. | 1 | 2 | 1 | 1 | 1 |
| Edward Everett | 303 | 270 | 573 | 274 | 240 | 514 | 59 | 90. | 1 | 1 | 1 | 1 | 1 |
| Eliot | 966 | | 966 | 861 | | 861 | 105 | 89. | 1 | 3 | 1 | 1 | 1 |
| Emerson | 438 | 307 | 745 | 404 | 284 | 688 | 57 | 92. | 1 | 1 | 2 | 2 | 1 |
| Everett | | 662 | 662 | | 590 | 590 | 72 | 89. | 1 | | 2 | 3 | |
| Franklin | | 683 | 683 | | 609 | 609 | 74 | 89. | 1 | | 2 | 3 | 1 |
| Frothingham | . 268 | 330 | 598 | 236 | 292 | 528 | 70 | 88. | 1 | 1 | 2 | 2 | ļ |
| Gaston | | 666 | 666 | | 588 | 588 | 78 | 88. | 1 | | 2 | 2 | |
| George Putnam | . 157 | 177 | 334 | 142 | 157 | 299 | 35 | 90. | 1 | | 1 | 1 | |
| Gibson | . 183 | 208 | 391 | 173 | 188 | 361 | 30 | 92. | 1 | 1 | 1 | 1 | 1 |
| Hancock | . 8 | 590 | 598 | 7 | 514 | 521 | 77 | 87. | 1 | | 2 | 2 | 2 |
| Harris | . 147 | 158 | 305 | 137 | 140 | 277 | 28 | 92. | 1 | ١. | 1 | 1 | |

GRAMMAR SCHOOLS. — Concluded.

| Schools. | Ave | rage wi Vumbe | hole r. | | Averag tendan | | ge ence. | r cent. of Attendance. | | Sub-Masters. | Assistants. | Assistants. | Assistants. |
|-----------------|--------|------------------|------------|-------------|------------------|-------------|------------------|---------------------------|----------|--------------|-------------|-------------|-------------|
| | Boys. | Girls. | Total. | Boys. | Girls. | Total. | Average Absence. | Per cent. | Masters. | Sub-M | 1st .\s | 2d Ass | 3d Ase |
| Harvard | 321 | 316 | 637 | 293 | 285 | 57 8 | 59 | 91. | 1 | 1 | 2 | 2 | 8 |
| Henry L. Pierce | 127 | 119 | 246 | 118 | 106 | 224 | 22 | 91. | | 1 | | 2 | 4 |
| Hugh O'Brien | 439 | 313 | 752 | 409 | 289 | 698 | 54 | 93. | 1 | 1 | 2 | 2 | 9 |
| Hyde | | 579 | 579 | | 522 | 522 | 57 | 90. | 1 | | 2 | 2 | 8 |
| John A. Andrew | 375 | 331 | 706 | 347 | 301 | 648 | 58 | 92. | 1 | 1 | 2 | 2 | 9 |
| Lawrence | 857 | | 857 | 807 | | 807 | 50 | 94. | 1 | 3 | 1 | 1 | 11 |
| Lewis | 350 | 348 | 698 | 324 | 321 | 645 | 53 | 93. | 1 | 1 | 2 | 2 | 7 |
| Lincoln | 535 | | 535 | 488 | | 488 | 47 | 92. | 1 | 1 | 1 | 1 | 8 |
| Lowell | 371 | 382 | 753 | 346 | 348 | 694 | 59 | 92. | 1 | 1 | 2 | 2 | 9 |
| Lyman | 401 | 177 | 578 | 35 8 | 157 | 515 | 63 | 89. | 1 | 1 | 2 | 2 | 8 |
| Martin | 167 | 174 | 341 | 151 | 153 | 304 | 37 | 89. | 1 | 1 | 1 | 2 | 5 |
| Mather | 279 | 275 | 554 | 253 | 239 | 492 | 62 | 89. | 1 | 1 | 1 | 1 | 8 |
| Minot | 148 | 160 | 308 | 138 | 144 | 282 | 26 | 92. | 1 | | 1 | 1 | 4 |
| Mt. Vernon | 106 | 119 | 225 | 96 | 109 | 205 | 20 | 91. | | 1 | 1 | 1 | 4 |
| Norcross | | 662 | 662 | | 591 | 591 | 71 | 89. | 1 | | 2 | 3 | g |
| Phillips | 753 | | 753 | 665 | | 665 | 88 | 88. | 1 | 2 | 1 | 1 | 11 |
| Prescott | 250 | 258 | 508 | 229 | 229 | 458 | 50 | 90. | 1 | 1 | 1 | 1 | 7 |
| Prince | 223 | 259 | 482 | 207 | 233 | 440 | 42 | 91. | 1 | 1 | 1 | 1 | 7 |
| Quincy | 554 | | 554 | 485 | | 485 | 69 | 88. | 1 | 2 | 1 | 1 | 7 |
| Rice | 514 | | 514 | 478 | | 478 | 36 | 93. | 1 | 2 | 1 | 6 | 2 |
| Sherwin | 566 | | 566 | 513 | | 513 | 53 | 91. | 1 | 2 | 1 | 1 | 7 |
| Shurtleff | | 642 | 642 | | 572 | 572 | 70 | 89. | 1 | | 2 | 3 | g |
| Stoughton | 206 | 214 | 420 | 188 | 188 | 376 | 44 | 90. | 1 | 1 | 1 | 1 | 8 |
| Thomas N. Hart | 436 | | 436 | 408 | | 408 | 28 | 94. | 1 | 1 | 1 | 1 | 5 |
| Tileston | 58 | 61 | 119 | 53 | 55 | 108 | 11 | | | 1 | | | 2 |
| Warren | 301 | 332 | 633 | 287 | 313 | | 33 | | 1 | 1 | 2 | 2 | 8 |
| Wells | | 506 | | | 440 | 440 | 66 | | 1 | | 2 | 1 | 8 |
| Winthrop | | 817 | 817 | | 707 | 707 | 110 | | 1 | | 2 | 5 | 10 |
| Totals | 16,157 | 14,529 | 30,686 | 14,782 | 12,966 | 27,748 | 2,938 | 87.1 | 52 | 52 | 79 | 90 | 414 |

Number of Pupils in each Class, Whole Number, and Ages, June 30, 1891. GRAMMAR SCHOOLS.

| and over. | ۱. | | | _ | | | က | | | က | | | | | | 67 | | | 67 | 2 | က | | 1 | |
|-----------------------|-------|---------|------------|---------|---------|----------|---------|----------|-------------|---------|----------|--------|----------|----------|--------|--------|----------------|-------|---------|---------|----------|-------------|----------|---|
| Eighteen years | 1: | : | | | : | : | | | : | | | | : | • | • | | | : | | | | • | | |
| Seventeen years. | 63 | က | 7 | 1. | 7 | C1 | œ | 5 | 10 | 14 | 9 | C1 | 4 | 4 | 1 | L- | 7 | က | 14 | 15 | 13 | 61 | 11 | |
| Sixteen years. | 19 | 19 | 33 | 34 | 14 | 21 | 26 | 21 | 21 | 28 | 22 | 00 | 11 | 23 | 18 | 28 | 20 | 15 | 33 | 32 | 26 | 24 | 43 | |
| Fifteen years. | 88 | 36 | 53 | 67 | 38 | 44 | 37 | 53 | 54 | 67 | 40 | 37 | 42 | 99 | 48 | 61 | 58 | 51 | 59 | 91 | 7.4 | 29 | 55 | |
| Fourteen years. | 159 | 99 | 93 | 11 | 83 | 53 | 45 | 86 | 101 | 87 | 99 | 88 | 15 | 64 | 7. | 88 | 95 | 165 | 95 | 100 | 80 | 83 | 86 | |
| Thirteen years. | 65 | 89 | 106 | 89 | 123 | 47 | 55 | 110 | 88 | 91 | 95 | 95 | 110 | 107 | 104 | 115 | 124 | 183 | 109 | 96 | 66 | 103 | 92 | _ |
| Twelve years. | 12 | 65 | 124 | 84 | 126 | 53 | 78 | 111 | 137 | 88 | 103 | 103 | 114 | 06 | 112 | 101 | 113 | 185 | 113 | 105 | 108 | 121 | 118 | - |
| Eleven years. | 89 | 59 | 112 | 7.5 | 96 | 65 | 40 | 93 | 107 | 11 | 95 | 92 | 118 | 97 | 84 | 112 | 87 | 148 | 113 | 84 | 86 | 95 | 104 | |
| Ten years. | 104 | 55 | 105 | 19 | 111 | 42 | 38 | 87 | 53 | 74 | 92 | 99 | 13 | 99 | 00 | 67 | 37 | 126 | 10 | 73 | 19 | 99 | 87 | |
| Vine years. | 15 | 21 | 40 | 15 | 99 | 21 | 15 | 36 | 23 | 31 | 54 | 22 | 40 | 23 | 43 | 27 | 18 | 37 | 93 | 34 | 42 | 18 | 41 | - |
| Elght years. | , es | • | 4 | က | 15 | c1 | c1 | 6 | 1 | œ | 12 | : | 21 | 1 | 67 | 00 | c1 | 20 | - | 7 | က | : | 00 | |
| Under eight yeara. | | • | : | : | : | • | • | : | : | 1 | - | • | • | • | : | : | : | က | : | : | • | • | : | |
| Мроје пишрек | 387 | 382 | 819 | 464 | 699 | 350 | 317 | 613 | 010 | 563 | 571 | 909 | 595 | 531 | 564 | 622 | 299 | 936 | 099 | 624 | 624 | 559 | 89 | |
| easIO bebrigaU | : | : | - <u>-</u> | : | : | : | : | 37 | 34 | • | : | : | 22 | : | 32 | 33 | : | 243 | 51 | 21 | • | 32 | • | - |
| Sixth Class. | 96 | 99 | 178 | 100 | 168 | 87 | 84 | 130 | 143 | 120 | 176 | 103 | 159 | 110 | 105 | 103 | 116 | 173 | 171 | 102 | 153 | 139 | 161 | |
| Fifth Class. | 182 | 108 | 108 | 100 | 152 | 73 | 22 | 149 | 125 | 143 | 120 | 110 | 138 | 109 | 100 | 105 | 118 | 128 | 178 | 144 | 144 | 100 | 147 | |
| Fourth Class. | 09 | 66 | 105 | 103 | 144 | 49 | 36 | 85 | 126 | 106 | 112 | 84 | 96 | 101 | 122 | 141 | 110 | 149 | 11 | 97 | 83 | 94 | 113 | |
| Third Class. | 12 | 53 | 110 | 96 | 06 | 52 | 53 | 91 | 80 | 91 | 14 | 81 | 72 | 06 | 92 | 06 | 86 | 98 | 97 | 95 | 06 | 94 | 66 | |
| Second Class. | 46 | 34 | 83 | 49 | 74 | 54 | 83 | 87 | 55 | 52 | 45 | 98 | 61 | 11 | 19 | 16 | 22 | 96 | 47 | 06 | 95 | 55 | 88 | - |
| First Class. | 36 | 32 | 94 | 46 | 41 | 35 | 36 | 33 | 49 | 51 | 44 | 45 | 47 | 44 | 46 | 53 | 45 | 49 | 45 | 15 | 59 | 45 | 20 | |
| • | : | : | • | • | • | : | : | | • | | | : | : | : | : | : | | : | : | : | • | : | , | |
| | | | | | : | : | • | • | • | • | | • | : | | : | | • | | : | | | | ٠ | |
| Scноогs. | | | · | · | | | ٠ | | · | · | Sumner | | | | | | rett | | | i | · | | | |
| НО | | | | | | • | | | E | • | nm | : | • | • | | | Lvel | | : | | | am | : | |
| 88 | | 2 | | tt | A | tch | in | Brimmer. | Bunker Hill | Chapman | 02 02 | 00 | Dearborn | чу | | 42 | Edward Everett | • | uc | + | in | Frothingham | | |
| | Adams | Agassiz | Allston | Bennett | Bigelow | Bowditch | Bowdoin | mm | nke | ppu | Charles | Comins | rpc | Dillaway | Dudley | Dwight | war | . 1C | Emerson | Tverett | Franklin | thir | Gaston . | |
| | ld. | 00 | = | 3er | Sig | 30 | 301 | Sri | 3nı | ,hg |)be | or |)eg |);i |)n(| W | gd | Eliot | Cm | Ve | ra | ro | las | 1 |

| - | | 1 | | : | • | 7 | Т | : | : | • | 7 | : | : | : | • | | : | П | : | භ | 1 | က | - | 1 | : | : | • | က | 7 | 2 | 17 | .16 |
|--------|---------|--------|---------|-----------------|--------------|------|----------------|----------|-------|---------|--------|-------|----------|--------|-------|------------|----------|----------|----------|--------|--------|------|---------|-----------|-----------|----------------|----------|--------|-------|----------|--------|-----------|
| œ. | 9 | 5 | 4 | 61 | 12 | 4 | ಣ | : | 6 | භ | : | 12 | 9 | г | : | 4 | | ∞ | 4 | 6 | 21 | | 31 | L-0 | 23 | 63 | П | 2 | | 12 | 295 | 1.00 |
| 14 | 13 | 16 | 17 | 10 | 53 | 27 | 2.5 | 14 | 33 | 16 | 16 | 77 | 53 | 17 | 11 | 10 | Π. | 19 | 16 | 28 | 00 | 13 | 32 | . 24 | 12. | 14 | П | 33 | 1 | 27 | 1,130 | 3.85 |
| 39 | 46 | 30 | 48 | 32 | 91 | 55 | 48 | 39 | 62 | 36 | 89 | 53 | 41 | 38 | 56 | 19 | 33 | 8# | 42 | 61 | 26 | 52 | 20 | 99 | 36 | 38 | 6 | 97 | 37 | 52 | 2,576 | 8.77 |
| 57 | 61 | 44 | 65 | 34 | 117 | 19 | 81 | 91 | 86 | 85 | 92 | 7.4 | 48 | 83 | 46 | 40 | 7.7 | 109 | 81 | 74 | 62 | 20 | 14 | 85 | 77 | 80 | 16 | 63 | 56 | 66 | 4,170 | 14.20 |
| 99 | 100 | 90 | 105 | 09 | 137 | 110 | 130 | 143 | 100 | 66 | 149 | 7.7 | . [9] | 88 | 49 | 37 | 121 | 143 | 104 | 2.5 | 107 | 86 | 84 | 164 | 99 | 69 | 23 | 66 | 96 | 152 | 5,218 | 17.76 |
| 59 | 108 | 58 | 129 | 29 | 132 | 101 | 111 | 173 | 118 | 107 | 134 | 103 | 32 | 116 | 59 | 37 | 112 | 130 | 91 | 87 | 111 | 98 | 80 | 86 | 61 | 61 | 13 | 87 | 125 | 129 | 5,363 | 18.25 |
| 89 | 88 | 53 | 93 | 33 | 1111 | 105 | 121 | 166 | 123 | 85 | 128 | 95 | 55 | 90 | 36 | 37 | 126 | 118 | 67 | 69 | 84 | 85 | 104 | 86 | 282 | 87 | 26 | 90 | 62 | 151 | 4,880 | 16.61 |
| 49 | 91 | 31 | 90 | 16 | 84 | 09 | 74 | 96 | 91 | 61 | 16 | 75 | 32 | 69 | 43 | 23 | 106 | 68 | 22 | 99 | 11 | 63 | 99 | 84 | 28 | 2.5 | 19 | 91 | 54 | 85 | 3,725 | 12.68 |
| 22 | 35 | ∞ | 35 | • | 38 | 25 | 53 | 58 | 43 | 25 | 51 | 27 | 20 | 33 | 30 | 6 | 44 | 33 | 24 | 21 | 93 | 37 | 31 | 47 | 56 | 21 | 6 | 39 | 50 | 57 | 1,680 | 5.72 |
| က် | 14 | Т. | 1- | • | 2 | 4 | 17 | 23 | 5 | 4 | 5 | 7 | က | ¢1 | _ | c1 | හ | t- | 23 | 1 | 12 | 4 | 10 | 1- | භ | 9 | 61 | c | 4 | 6 | 285 | .97 |
| : | - | : | | : | : | : | : | • | • | • | : | • | : | : | 1 | : | : | : | • | : | : | • | : | • | : | : | : | • | : | : | oo l | .03 |
| 386 | 565 | 297 | ₹69 | 244 | 138 | 1129 | 199 | 803 | 673 | 515 | 741 | 541 | 327 | 537 | 302 | 219 | 628 | 202 | 909 | 488 | 518 | 200 | 584 | 621 | 415 | 421 | 119 | 299 | 08₹ | 277 | 29,377 | 100 |
| • | 153 | : | 37 | | : | 36 | : | 89 | 52 | 30 | : | 27 | : | | : | : | • | 7.5 | : | : | 933 | 33 | 32 | : | | : | • | 31 | 87 | • | 1,226 | 4.2 |
| 87 | 107 | 55 | 156 | 45 | 226 | 111 | 157 | 158 | 113 | 121 | 178 | 123 | 48 | 150 | 85 | 20 | 198 | 156 | 114 | 91 | 171 | 107 | 101 | 157 | 85 | 103 | 24 | 191 | 95 | 186 | 689,0 | 2.2.8 |
| 84 | 76 | 63 | 135 | 40 | 135 | 140 | 204 | 157 | 119 | 97 | 171 | 119 | 55 | 101 | 65 | 38 | 155 | 156 | 143 | 95 | 97 | 100 | 151 | 196 | 92 | 27 | 22 | 126 | 80 | 210 | 6,311 | 21.4 |
| 91 | 94 | 99 | 888 | 49 | 135 | 89 | 130 | 141 | 106 | 102 | 157 | 88 | 19 | 96 | 90 | 45 | 116 | 135 | 81 | 18 | 86 | 88 | 102 | 96 | 84 | 91 | 15 | 18 | 98 | 152 | 5,198 | 17.7 |
| 19 | 44 | 55 | 67 | 34 | 95 | 85 | 88 | 127 | 105 | 69 | 93 | 83 | 40 | 93 | 42 | 53 | 06 | 80 | 72 | 93 | ç‡ | 22 | 69 | ∞ 1~ | 62 | 81 | 53 | 80 | 48 | 95 | 4,202 | 14.3 |
| 43 | 36 | 35 | 48 | 42 | 53 | 80 | 45 | 98 | 16 | 61 | 06 | 48 | 55 | 47 | 30 | 32 | 38 | 69 | 52 | 15 | 39 | 53 | 46 | 45 | 63 | 42 | 17 | . 57 | 45 | 75 | 3,251 | 11.1 |
| 45 | 37 | 36 | 51 | 37 | 16 | 30 | 55 | 27 | 81 | 35 | 52 | 53 | 90 90 | 44 | 30 | 28 | 31 | 37 | 7-7- | 74 | 35 | 61 | 33 | 55 | 91 | 35 | 13 | 44 | 33 | 57 | 2,500 | 8.5 |
| Gibson | Hancock | Harris | Harvard | Henry L. Pierce | Hugh O'Brien | Hyde | John A. Andrew | Lawrence | Lewis | Lincoln | Lowell | Lyman | Martin | Mather | Minot | Mt. Vernon | Noreross | Phillips | Prescott | Prince | Quincy | Rice | Sherwin | Shurtleff | Stoughton | Thomas N. Hart | Tileston | Warren | Wells | Winthrop | Totals | Per cents |

DISTRIBUTION OF PUPILS IN RESPECT BOTH

| | CLASSES. | | Under 5 years. | 5 years. | 6 years. | 7 years. | 8 years. | 9 years. |
|------------------|-----------------------|------------|----------------------|-------------|---------------|----------------|-------------|--------------|
| Latin Schools. | All Classes { | Boys Girls | | • • | | • • | • • | · · · |
| | 1 Totals | | 1 | | • • | • • | • • • | |
| | Advanced Class { | Boys Girls | | | | | | • • |
| nools. | Third-year Class { | Boys Girls | | | | | | |
| High Schools. | Second-year Class . { | Boys Girls | | | | | | :: |
| H | First-year Class { | Boys Girls | | • • | | | | : : |
| | Totals | | | | | | | |
| | First Class { | Boys Girls | : : | | :: | | | :: |
| | Second Class { | Boys Girls | | | • • | • • | | • • |
| sloo. | Third Class | Boys Girls | | | :: | | | • • |
| r Schools. | Fourth Class { | Boys Girls | :: | :: | :: | | :: | 6 4 |
| Grammar | Fifth Class { | Boys Girls | | | | | 2 5 | 120 103 |
| Gr | Sixth Class{ | Boys Girls | | | ::, | 2 | 128 95 | 673 663 |
| | Ungraded Class { | Boys Girls | | | | 4 | 38 17 | 76 35 |
| | Totals | | | | | 8 | 285 | 1,680 |
| ols. | First Class { | Boys Girls | | | 2 | 90 | 694 704 | 1,111 976 |
| Schoo | Second Class{ | Boys Girls | | 5 9 | 253 237 | | | 870 708 |
| Primary Schools. | Third Class { | Boys Girls | 20 13 | | 2,122 $1,812$ | 1,583 1,344 | 661 581 | 222 200 |
| Pr | Totals | | 33 | 1,899 | 4,426 | 5,347 | 5,397 | 4,087 |
| | Grand totals | | 33 | 1,899 | 1,426 | 5,355 | $ {5,682} $ | 5,767 |

TO AGE AND TO CLASSES, JUNE, 1891.

| 10 | - 1 | | | | | | | | | |
|--------------|------------|------------|------------|------------|------------|------------|------------|----------|--------------|----------------|
| | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 years | |
| years. | years. | years. | years. | years. | years. | years. | years. | years. | and over. | Totals. |
| | 1 | 18 | 46 | 88 | 96 | 96 | 86 | 48 | 23 | 502 |
| | 1 | 6 | 9 | 17 | 25 | 50 | 26 | 17 | 22 | 173 |
| | 2 | 24 | 55 | 105 | 121 | 146 | 112 | 65 | 45 | 675 |
| | | | | | | 1 | 5 | 10 | 7 | 23 |
| | | | • | • • | | | 11 | 35 | 45 | 91 |
| | | | | | 9 2 | 47 30 | 96 89 | 71 73 | 23 61 | 246 255 |
| | | | | | | 114 | 101 | | | 0.40 |
| | | | | 11 3 | 61 39 | 114 102 | 124 111 | 34 54 | 5 20 | 349 329 |
| | | | 11 | 52 | 178 | 148 | 70 | 3 | 2 | 464 |
| · · · | | | 2 | 42 | 141 | 203 | 105 | 37 | 5 | 535 |
| | | | 13 | 108 | 430 | 645 | 611 | 317 | 168 | 2,292 |
| | | 7 | 85 | 324 | 408 | 283 | 80 | 9 | l | 1,196 |
| | | 2 | 63 | 300 | 477 | 312 | 124 | 26 | | 1,304 |
| | 8 5 | 102 73 | 401 291 | 595 533 | 396 445 | 147 188 | 17 41 | 5 4 | | 1,671 1,580 |
| 8 | 101 | 428 | 719 | 577 | 245 | 67 | 8 | 1 | | 2,154 |
| 3 | 72 | 415 | 676 | 537 | 265 | 68 | 11 | 1 | | 2,048 |
| 119 | 548 | 903 | 733 | 378 | 99 | 25 | 4 | | | 2,815 |
| 98 | 429 | 722 | 653 | 332 | 113 | 25 | 6 | 1 | | 2,383 |
| 586 565 | 972 935 | 823 765 | 513 463 | 192 173 | 38 40 | 5 8 | 2 | | | 3,253 3,058 |
| 1.007 | 838 | 466 | 230 | 77 | 13 | 1 | | | | |
| 1,087 982 | 731 | 421 | 215 | 58 | 7 | | | : : | | 3,516 3,173 |
| 191 | 167 | 143 | 118 | 70 | 23 | 1 | | | | 831 |
| 86 | 74 | 93 | 58 | 24 | 7 | | | | | 395 |
| 3,725 | 4,880 | 5,363 | 5,218 | 4,170 | 2,576 | 1,130 | 295 | 47 | | 29,377 |
| 725 | 279 | 94 | 36 | | | | | | | 3,031 |
| 692 | 285 | 105 | 41 | | • • | | | | | 2,910 |
| 323 302 | 96 92 | 33 33 | 14 12 | : : | : : | :: | : : | : : | | 4,243 3,724 |
| | | | | | | | | | | |
| 75 67 | 12 26 | 10 10 | 3 6 | | | : : | | | | 5,729 $4,923$ |
| 2,184 | 790 | 285 | 112 | | | | | | | 24,560 |
| 5,909 | 5,672 | 5,672 | 5,398 | 4,383 | 3,127 | 1,921 | 1,018 | 429 | 213 | 56,904 |

GRAMMAR SCHOOLS.

Number of Pupils to a Teacher, excluding Principals, June, 1891.

| Schools. | No. of Teachers. | Average No. of Pupils. | No. of Pupils to a Teacher. | Schools. | No. of Teachers. | Average No. of Pupils. | No. of Pupils to a Teacher. |
|---------------|---------------------|------------------------|--------------------------------|----------------|---------------------|---------------------------|--------------------------------|
| Adams | 10 | 398 | 39.8 | H. L. Pierce | 6 | 246 | 41.0 |
| Agassiz | 8 | 397 | 49.6 | Hugh O'Brien. | 14 | 752 | 53.7 |
| Allston | 13 | 705 | 54.2 | Hyde | 12 | 579 | 48.2 |
| Bennett | 10 | 509 | 50.9 | J. A. Andrew. | 14 | 706 | 50.4 |
| Bigelow | 14 | 695 | 49.6 | Lawrence | 16 | 857 | 53.6 |
| Bowditch | 7 | 357 | 51.0 | Lewis | 12 | 698 | 58.2 |
| Bowdoin | 9 | 338 | 37.5 | Lincoln | 11 | 535 | 48.6 |
| Brimmer | 14 | 633 | 45.2 | Lowell | 14 | 753 | 53.8 |
| Bunker Hill . | 14 | 646 | 46.1 | Lyman | 13 | 578 | 44.5 |
| Chapman | 12 | 573 | 47.7 | Martin | 9 | 341 | 37.9 |
| Chas. Sumner | 12 | 589 | 49.1 | Mather | 11 | 554 | 50.4 |
| Comins | 10 | 530 | 53.0 | Minot | 6 | 308 | 51.3 |
| Dearborn | 13 | 626 | 48.1 | Mt. Vernon | 6 | 225 | 37.5 |
| Dillaway | 11 | 550 | 50.0 | Norcross | 14 | 662 | 47.3 |
| Dudley | 14 | 586 | 41.8 | Phillips | 15 | 753 | 50.2 |
| Dwight | 13 | 652 | 50.1 | Prescott | 10 | 508 | 50.8 |
| Edw. Everett. | 11 | 573 | 52.1 | Prince | 10 | 482 | 48.2 |
| Eliot | 20 | 966 | 48.3 | Quincy | 11 | 554 | 50.4 |
| Emerson | 15 | 745 | 49.7 | Rice | 11 | 514 | 46.7 |
| Everett | 14 | 662 | 47.3 | Sherwin | 11 | 566 | 51.4 |
| Franklin | 14 | 683 | 48.8 | Shurtleff | 14 | 642 | 45.8 |
| Frothingham. | 12 | 598 | 49.8 | Stoughton | 11 | 420 | 38.2 |
| Gaston | 13 | 666 | 55.5 | Thos. N. Hart. | 8 | 436 | 54.5 |
| Geo. Putnam. | 7 | 334 | 47.7 | Tileston | 2 | 119 | 59.5 |
| Gibson | 8 | 391 | 48.9 | Warren | 13 | 633 | 48.7 |
| Hancock | 12 | 598 | 49.8 | Wells | 11 | 506 | 46.0 |
| Harris | 7 | 305 | 43.6 | Winthrop | 17 | 817 | 48.1 |
| Harvard | 13 | 637 | 49.0 | Totals | 632 | 30,686 | 48.6 |

STATISTICS.

GRAMMAR SCHOOLS. Graduates, June, 1891.

| | D. | IPLOM | AS. | | I | DIPLOM. | AS. |
|----------------|-------|--------|--------|-----------------|-------|---------|--------|
| Schools. | Boys. | Girls. | Total. | Schools. | Boys. | Girls. | Total. |
| Adams | 17 | 11 | 28 | Henry L. Pierce | 15 | 18 | 33 |
| Agassiz | 32 | | 32 | Hugh O'Brien | 48 | 42 | 90 |
| Allston | 35 | 46 | 81 | Hyde | | 30 | 30 |
| Bennett | 23 | 23 | 46 | John A. Andrew | 18 | 19 | 37 |
| Bigelow | 37 | | 37 | Lawrence | 69 | | 69 |
| Bowditch | | 35 | 35 | Lewis | 35 | 45 | 80 |
| Bowdoin | | 34 | 34 | Lincoln | 35 | | 35 |
| Brimmer | 33 | | 33 | Lowell | 26 | 26 | 52 |
| Bunker Hill | 14 | 33 | 47 | Lyman | 33 | 17 | 50 |
| Chapman | 28 | 23 | 51 | Martin | 18 | 31 | 49 |
| Charles Sumner | 21 | 18 | 39 | Mather | 20 | 23 | 43 |
| Comins | 15 | 27 | 42 | Minot | 13 | 13 | 26 |
| Dearborn | 15 | 32 | 47 | Mt. Vernon | 8 | 17 | 25 |
| Dillaway | | 44 | 44 | Norcross | | 31 | 31 |
| Dudley | 46 | | 46 | Phillips | 38 | | 38 |
| Dwight | 52 | | 52 | Prescott | 15 | 25 | 40 |
| Edward Everett | 21 | 24 | 45 | Prince | 13 | 34 | 47 |
| Eliot | 46 | | 46 | Quincy | 34 | | 34 |
| Emerson | 21 | 24 | 45 | Rice | 47 | | 47 |
| Everett | | 75 | 75 | Sherwin | 33 | | 33 |
| Franklin | | 57 | 57 | Shurtleff | | 52 | 52 |
| Frothingham | 19 | 26 | 45 | Stoughton | 20 | 26 | 46 |
| Gaston | | 50 | 50 | Thomas N. Hart | 32 | | 32 |
| George Putnam | 13 | 19 | 32 | Tileston | 5 | 5 | 10 |
| Gibson | 22 | 22 | 44 | Warren | 20 | 24 | 44 |
| Hancock | | 38 | 38 | Wells | | 38 | 38 |
| Harris | 15 | 13 | 28 | Winthrop | | 52 | 52 |
| Harvard | 20 | 31 | 51 | Totals | 1140 | 1,273 | 2,413 |

TABLE SHOWING THE NUMBER OF YEARS THE DIPLOMA GRADUATES OF 1891 BELONGED TO A GRAMMAR SCHOOL IN THIS CITY.

| Schools. | 2 years or less. | | .8 | rg. | .8. | rs. | 38. | rs. | В. | rs. | 30 | rs. | 9 years and over. | ven. | |
|----------------|------------------|----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-------------------|------------|--------|
| | 2 year | 3 усагв. | 4 years. | 4½ years. | 5 years. | 5½ years. | 6 years. | 6½ years. | 7 years. | 7½ years. | 8 усагв. | 84 усагв. | 9 year | Not given. | Total. |
| Adams | | | 1 | | 2 | 1 | 4 | 12 | 3 | 5 | | | | | 28 |
| Agassiz | | | 1 | | 4 | | 14 | | 7 | | | | | 6 | 32 |
| Allston | | | | | 3 | 1 | 30 | | 26 | | 6 | | 1 | 14 | 81 |
| Bennett | | | | | 1 | | 17 | | 18 | | 5 | ٠., | | 5 | 46 |
| Bigelow | | | | | 1 | 1 | 10 | 1 | 16 | 4 | 3 | 1 | | | 37 |
| Bowditch | | | | | 1 | | 13 | | 11 | | 3 | | | 7 | 35 |
| Bowdoin | | | | | 5 | | 12 | | 10 | | 1 | | | 6 | 34 |
| Brimmer | 2 | | 1 | | 6 | | 9 | | 12 | 3 | | | | | 33 |
| Bunker Hill | | | | | 1 | | 37 | | 2 | | | | | 7 | 47 |
| Chapman | 1 | 1 | 3 | | 1 | } | 7 | | 21 | | 12 | | 5 | | 51 |
| Charles Sumner | 1 | | | | 4 | 1 | 16 | | 11 | | | | | 6 | 39 |
| Comins | | | | | 8 | | 28 | | 6 | | | | | | 42 |
| Dearborn | | | | | 6 | 4 | 24 | | 11 | 2 | | | | | 47 |
| Dillaway | | | | | 8 | | 19 | | 14 | | 3 | | | | 44 |
| Dudley | 1 | 1 | | | 9 | | 26 | | 6 | | 2 | | 1 | | 46 |
| Dwight | | | | | | | 10 | | 9 | | | 7 | | 26 | 52 |
| Edward Everett | | | | | 6 | 2 | 17 | | 13 | | 1 | | | 6 | 45 |
| Eliot | 1 | 2 | | | 5 | 1 | 26 | 1 | 8 | 2 | | | | | 46 |
| Emerson | ٠., | | 1 | | 1 | 2 | 12 | 2 | 12 | 1 | 9 | | 1 | 4 | 45 |
| Everett | | | 1 | | 12 | | 22 | | 12 | | 11 | | 1 | 16 | 75 |
| Franklin | | ļ | 1 | | 5 | | 16 | 6 | 9 | | 8 | | 2 | 10 | 57 |
| Frothingham | 1 | | 1 | | | | 16 | 1 | 13 | | 10 | | | 3 | 45 |
| Gaston | 1 | 1 | | | | | 16 | 4 | 19 | | 7 | | 1 | 1 | 50 |
| George Putnam | | | | | 4 | ٠., | 14 | | 11 | | 1 | | 2 | | 32 |
| Gibson | 3 | | 2 | 1 | 3 | | 28 | | 7 | | | | | | 44 |
| Hancock | | | | | 6 | | 19 | | 8 | | 5 | | | | 38 |
| Harris | | | | | | | 13 | | 12 | | 3 | | | | 28 |

TABLE SHOWING THE NUMBER OF YEARS THE DIPLOMA GRADUATES OF 1891 BELONGED TO A GRAMMAR SCHOOL IN THIS CITY. — Concluded.

| Schools. | 2 years or less. | 3 years. | 4 years. | 4½ years. | 5 years. | 5½ years. | 6 years. | 6½ years. | 7 years. | 7½ years. | 8 years. | 8½ years. | 9 years and over. | Not given. | Total. |
|------------------|------------------|----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|-------------------|------------|--------|
| Harvard | | | ٠., | | 5 | | 38 | | 6 | | | | | 2 | 51 |
| Henry L. Pierce. | | | | | 3 | | 18 | | | | 4 | | | 8 | 33 |
| Hugh O'Brien | | | 2 | • | 25 | | 36 | 2 | 22 | | | | | 3 | 90 |
| Hyde | | 1 | | | 1 | | 10 | 1 | 15 | | 2 | | | | 30 |
| John A. Andrew. | | | | 1 | 5 | 1 | 14 | 1 | 10 | 1 | 1 | • | | 3 | 37 |
| Lawrence | 1 | | 2 | | 15 | 14 | 27 | 4 | 6 | | | | | | 69 |
| Lewis | | | 1 | | 17 | 13 | 38 | | 8 | | 1 | | , | 2 | 80 |
| Lincoln | | | 2 | | 15 | | 9 | | 5 | | 1 | | | 3 | 35 |
| Lowell | | | | | 1 | 2 | 35 | 1 | 5 | | | | | 8 | 52 |
| Lyman | 2 | 2 | 1 | | 5 | | 18 | | 19 | | 3 | | | | 50 |
| Martin | 2 | 1 | | | 1 | | 30 | | 10 | | 5 | | | | 49 |
| Mather | 4 | 2 | | | 4 | | 22 | | 7 | 1 | 3 | | | | 43 |
| Minot | | | | | | | 17 | | 6 | | 1 | | | 2 | 26 |
| Mt. Vernon | | | ٠ | | 1 | | 14 | | 7 | | | | | 3 | 25 |
| Norcross | | | | | 2 | | 11 | | 14 | | 4 | | | | 31 |
| Phillips | | | 1 | 2 | 1 | | 25 | | 5 | | | | | 4 | 38 |
| Prescott | | | | | 10 | | 26 | | 4 | | | | | | 40 |
| Prince | | | 1 | | 5 | 1 | 20 | | 7 | | 1 | | | 12 | 47 |
| Quincy | : | | | | | | 21 | | 11 | | 2 | | | | 34 |
| Rice | | | | | 6 | | 25 | | 10 | | 2 | | | 4 | 47 |
| Sherwin | | | | | 1 | | 13 | | 17 | | 2 | | | | 33 |
| Shurtleff | | 3 | 3 | | 3 | | 10 | | 20 | | 11 | | 2 | | 52 |
| Stoughton | | | 2 | 1 | 2 | | 12 | 14 | 7 | | 2 | | | 6 | 46 |
| Thomas N. Hart. | | | 2 | 2 | 10 | 1 | 16 | | 1 | | | | | | 32 |
| Tileston | | | | | 2 | | 7 | | | | | | | 1 | 10 |
| Warren | 6 | 3 | | | | | 13 | } | 13 | | 8 | | | 1 | 44 |
| Wells | 1 | 2 | 4 | | 5 | | 21 | | 3 | | 2 | | | | 38 |
| Winthrop | | 1 | • • • | ٠٠٠, | 4 | • • • | 12 | 3 | 20 | | 9 | | ٠ | 3 | 52 |
| Totals | 27 | 20 | 33 | 7 | 251 | 45 | 1033 | 53 | 565 | 19 | 154 | 8 | 16 | 182 | 2413 |

PRIMARY SCHOOLS.

Semi-Annual Returns, to June 30, 1891.

| Districts. | ners. | | rage w Number | | | Averag tendan | | Average Absence. | Per cent. of Attendance. | Between 5 and 8 years. | Over 8 years. | Whole No. at date. |
|----------------|-----------|-------|------------------|--------|-------|------------------|--------|---------------------|--------------------------|------------------------|---------------|--------------------|
| | Teachers. | Boys. | Girls. | Total. | Boys. | Girls. | Total. | Avera | Per ee | | Over | Whole date. |
| Adams | 6 | 177 | 132 | 309 | 151 | 111 | 262 | 47 | 86. | 137 | 174 | 311 |
| Agassiz | 3 | 111 | 73 | 184 | 100 | 62 | 162 | 22 | 88. | 75 | 102 | 177 |
| Allston | 10 | 274 | 285 | 559 | 221 | 225 | 446 | 113 | 80. | 266 | 298 | 564 |
| Bennett | 7 | 182 | 166 | 348 | 168 | 149 | 317 | 31 | 91. | 168 | 200 | 368 |
| Bigelow | 13 | 403 | 281 | 684 | 360 | 242 | 602 | 82 | 88. | 331 | 351 | 682 |
| Bowditch | 6 | 157 | 136 | 293 | 130 | 111 | 241 | 52 | 82. | 147 | 151 | 298 |
| Bowdoin | 8 | 153 | 164 | 317 | 125 | 132 | 257 | 60 | 81. | 144 | 188 | 332 |
| Brimmer | 8 | 194 | 163 | 357 | 173 | 140 | 313 | 44 | 87. | 222 | 150 | 372 |
| Bunker Hill | 12 | 267 | 264 | 531 | 237 | 228 | 465 | 66 | SS. | 223 | 313 | 536 |
| Chapman | 6 | 169 | 148 | 317 | 138 | 122 | 260 | 57 | 82. | 156 | 164 | 320 |
| Charles Sumner | 9 | 255 | 2:21 | 476 | 220 | 180 | 400 | 76 | 84. | 265 | 241 | 506 |
| Comins | 6 | 167 | 137 | 304 | 146 | 113 | 259 | 45 | 86. | 159 | 154 | 313 |
| Dearborn | 12 | 340 | 282 | 622 | 293 | 226 | 519 | 103 | 83. | 268 | 352 | 620 |
| Dillaway | 7 | 185 | 173 | 358 | 160 | 149 | 309 | 49 | 86. | 178 | 185 | 363 |
| Dudley | 13 | 333 | 340 | 673 | 285 | 276 | 561 | 112 | 83. | 292 | 380 | 672 |
| Dwight | 9 | 246 | 278 | 524 | 208 | 233 | 441 | 83 | 84. | 284 | 245 | 529 |
| Edward Everett | 7 | 224 | 213 | 437 | 188 | 168 | 356 | 81 | 81. | 222 | 230 | 452 |
| Eliot | 8 | 302 | 162 | 464 | 260 | 132 | 392 | 72 | 84. | 232 | 235 | 467 |
| Emerson | 10 | 295 | 281 | 576 | 239 | 232 | 471 | 105 | 82. | 251 | 348 | 599 |
| Everett | 10 | 272 | 260 | 532 | 232 | 217 | 449 | 83 | 85. | 227 | 297 | 524 |
| Franklin | 12 | 316 | 299 | 615 | 274 | 248 | 522 | 93 | 84. | 267 | 323 | 590 |
| Frothingham | 9 | 250 | 251 | 501 | 223 | 215 | 438 | 63 | 87. | 229 | 265 | 494 |
| Gaston | 9 | 178 | 292 | 470 | 153 | 244 | 397 | 73 | 85. | 213 | 259 | 472 |
| George Putnam | 4 | 118 | 109 | 227 | 99 | \$5 | 184 | 43 | 81. | 107 | 123 | 230 |
| Gibson | 6 | 151 | 146 | 297 | 136 | 128 | 264 | 33 | 87. | 147 | 147 | 294 |
| Hancock | 17 | 473 | 494 | 967 | 414 | 424 | 838 | 129 | 87. | 433 | 496 | 929 |
| Harris | 6 | 145 | 147 | 292 | 124 | 120 | 244 | 48 | 83. | 110 | 186 | 296 |
| Harvard | 12 | 317 | 288 | 605 | 280 | 249 | 529 | 76 | 87. | 305 | 309 | 614 |

STATISTICS.

PRIMARY SCHOOLS. - Concluded.

| DISTRICTS. | ers. | Ave | Average whole Number. | | | Average Attendance. | | | | Between 5 and 8 years. | years. | Whole No. at date. |
|--|-----------|--------|-----------------------|--------|--------|------------------------|--------|---------------------|-----------------------------|------------------------|---------------|--------------------|
| D ASSAULT OF THE STATE OF THE S | Teachers. | Boys. | Girls. | Total. | Boys. | Girls. | Total. | Average Absence. | Per cent. of Attendance. | Between 8 years. | Over 8 years. | Whole date. |
| Henry L. Pierce, | 4 | 100 | 82 | 182 | 85 | 69 | 154 | 28 | 84. | 93 | 104 | 197 |
| Hugh O'Brien . | 12 | 439 | 272 | 711 | 369 | 220 | 589 | 122 | 83. | 367 | 365 | 732 |
| Hyde | 8 | 227 | 241 | 468 | 204 | 209 | 413 | 55 | 81. | 220 | 253 | 473 |
| John A. Andrew | 11 | 303 | 301 | 604 | 261 | 255 | 516 | 88 | 85. | 303 | 282 | 585 |
| Lawrence | 17 | 640 | 213 | 853 | 580 | 186 | 766 | 87 | 90. | 417 | 451 | 868 |
| Lewis | 10 | 263 | 253 | 516 | 225 | 206 | 431 | 85 | 83. | 176 | 319 | 495 |
| Lincoln | 6 | 197 | 84 | 281 | 160 | 64 | 224 | 57 | 81. | 116 | 162 | 278 |
| Lowell | 16 | 450 | 431 | 881 | 379 | 362 | 741 | 140 | 84. | 492 | 426 | 918 |
| Lyman | 8 | 242 | 152 | 394 | 209 | 125 | 334 | 60 | 84. | 175 | 228 | 403 |
| Martin | 3 | 68 | 60 | 128 | 56 | 49 | 105 | 23 | 82. | 68 | 63 | 131 |
| Mather | 11 | 267 | 259 | 526 | 226 | 202 | 428 | 98 | 82. | 251 | 279 | 530 |
| Minot | 4 | 120 | 105 | 225 | 105 | 90 | 195 | 30 | 87. | 125 | 103 | 228 |
| Mount Vernon. | 5 | 95 | 85 | 180 | 81 | 63 | 144 | 36 | 80. | 85 | 97 | 182 |
| Norcross | 13 | 173 | 408 | 581 | 159 | 363 | 522 | 59 | 90. | 285 | 296 | 581 |
| Phillips | 7 | 195 | 183 | 378 | 167 | 148 | 315 | 63 | 84. | 200 | 178 | 378 |
| Prescott | 8 | 196 | 190 | 386 | 175 | 167 | 342 | 44 | 88. | 185 | 214 | 399 |
| Prince | 4 | 104 | 113 | 217 | 87 | 91 | 178 | 39 | 82. | 98 | 144 | 242 |
| Quincy | 13 | 394 | 284 | 678 | 334 | 236 | 570 | 108 | 84. | 331 | 340 | 671 |
| Rice | 7 | 173 | 155 | 328 | 143 | 120 | 263 | 65 | 81. | 135 | 185 | 320 |
| Sherwin | 9 | 232 | 217 | 449 | 207 | 192 | 399 | 50 | 89. | 233 | 225 | 458 |
| Shurtleff | 6 | 166 | 160 | 326 | 143 | 136 | 279 | 47 | 86. | 141 | 179 | 320 |
| Stoughton | 4 | 132 | 142 | 274 | 118 | 123 | 241 | 33 | 87. | 149 | 126 | 275 |
| Thomas N. Hart | 9 | 339 | 145 | 484 | 304 | 119 | 423 | 61 | 87. | 226 | 241 | 467 |
| Tileston | 2 | 33 | 42 | 75 | 28 | 35 | 63 | 12 | 84. | 42 | 37 | 79 |
| Warren | 7 | 180 | 181 | 361 | 165 | 166 | 331 | • 30 | 92. | 179 | 180 | 359 |
| Wells | 15 | 415 | 435 | 850 | 360 | 370 | 730 | 120 | 86. | 392 | 422 | 814 |
| Winthrop | 6 | 128 | 119 | 247 | 103 | 92 | 195 | 52 | 79. | 163 | 90 | 258 |
| Totals | 470 | 12,925 | 11,497 | 24,422 | 11,170 | 9,619 | 20,789 | 3,633 | 85. | 11,705 | 12,85 | 24,560 |

PRIMARY SCHOOLS.

Number of Pupils in each Class, Whole Number, and Ages, June 30, 1891.

| Districts. | First Class. | Second Class. | Third Class. | Whole Number. | Five years and under. | Six years. | Seven years. | Eight years. | Nine years. | Ten years. | Eleven years. | Twelve years. | Thirteen years and over. |
|-----------------|--------------|---------------|--------------|---------------|-----------------------|------------|--------------|--------------|-------------|------------|---------------|---------------|--------------------------|
| Adams | 77 | 97 | 137 | 311 | 23 | 58 | 56 | 72 | 51 | 33 | 12 | 4 | 2 |
| Agassiz | 40 | 46 | 91 | 177 | 10 | 29 | 36 | 48 | 29 | 14 | 8 | 3 | |
| Allston | 139 | 178 | . 247 | 564 | 48 | 98 | 120 | 113 | 94 | 47 | 24 | 12 | 8 |
| Bennett | 71 | 138 | 159 | 368 | 34 | 61 | 73 | 77 | 73 | 33 | 12 | 5 | |
| Bigelow | 187 | 219 | 276 | 682 | 41 | 134 | 156 | 160 | 107 | 52 | 23 | 7 | 2 |
| Bowditch | 78 | 104 | 116 | 298 | 28 | 55 | 61 | 62 | 53 | 22 | 10 | 4 | |
| Bowdoin | 80 | 104 | 148 | 332 | 15 | 55 | 74 | 84 | 57 | 35 | 8 | 1 | 3 |
| Brimmer | 96 | 106 | 170 | 372 | 26 | 98 | 98 | 89 | 46 | 11 | 4 | | |
| Bunker Hill | 118 | 224 | 194 | 536 | 36 | 87 | 100 | 122 | 106 | 58 | 22 | 4 | 1 |
| Chapman | 96 | 89 | 135 | 320 | 17 | 54 | 85 | 71 | 56 | 24 | 8 | 4 | 1 |
| Chas. Sumner . | 110 | 194 | 202 | 506 | 44 | 125 | 96 | 116 | 73 | 38 | 12 | 1 | 1 |
| Comins | 82 | 92 | 139 | 313 | 30 | 52 | 77 | 63 | 54 | 16 | 15 | 2 | 4 |
| Dearborn | 134 | 177 | 309 | 620 | 52 | 96 | 120 | 126 | 118 | 60 | 27 | 14 | 7 |
| Dillaway | 81 | 125 | 157 | 363 | 33 | 61 | 84 | 84 | 67 | 24 | 6 | 3 | 1 |
| Dudley | 147 | 192 | 333 | 672 | 58 | 98 | 136 | 148 | 106 | 70 | 29 | 20 | 7 |
| Dwight | 136 | 142 | 251 | 529 | 60 | 103 | 121 | 111 | 90 | 30 | 9 | 5 | |
| Edward Everett, | 106 | 145 | 201 | 452 | 40 | 78 | 104 | 108 | 72 | 33 | 7 | 5 | 5 |
| Eliot | 90 | 150 | 227 | 467 | 50 | 89 | 93 | 74 | 67 | 52 | 25 | 13 | 4 |
| Emerson | 129 | 227 | 243 | 599 | 46 | 93 | 112 | 115 | 98 | 82 | 30 | 15 | 8 |
| Everett | 126 | 151 | 247 | 524 | 25 | 72 | 130 | 141 | 84 | 57 | 12 | 2 | 1 |
| Franklin | 148 | 177 | 265 | 590 | 32 | 101 | 134 | 109 | 128 | 57 | 19 | 6 | 4 |
| Frothingham . | 167 | 157 | 170 | 494 | 28 | 106 | 95 | 76 | 100 | 56 | 30 | 2 | 1 |
| Gaston | 139 | 160* | 173 | 472 | 33 | 83 | 97 | 119 | 86 | 42 | 9 | 2 | 1 |
| Geo. Putnam . | 56 | 92 | 82 | 230 | 4 | 42 | 61 | 54 | 44 | 21 | 2 | 2 | |
| Gibson | 70 | 107 | 117 | 294 | 25 | 59 | 63 | 81 | 38 | 20 | 7 | 1 | |
| Hancock | 147 | 209 | 573 | 929 | 53 | 179 | 201 | 190 | 155 | 91 | 42 | 16 | 2 |
| Harris | 80 | 100 | 116 | 296 | 13 | 45 | 52 | 64 | 53 | 49 | 8 | 7 | 5 |
| Harvard | 149 | 204 | 261 | 614 | 51 | 117 | 137 | 150 | 87 | 48 | 19 | 5 | |

PRIMARY SCHOOLS. — Concluded.

| Districts. | First Class. | Second Class. | Third Class. | Whole Number. | Five years and under. | Six years. | Seven years. | Eight years. | Nine years. | Ten years. | Eleven years. | Twelve years. | Thirteen years and over. |
|-----------------|--------------|---------------|--------------|------------------|--------------------------|------------|--------------|--------------|-------------|------------|---------------|---------------|--------------------------|
| Henry L. Pierce | 55 | 90 | 52 | 197 | 9 | 6 | 48 | - 47 | 29 | 19 | 8 | | . 1 |
| Hugh O'Brien, | 193 | 186 | 353 | 732 | 78 | 131 | 158 | 153 | 111 | 68 | 21 | 8 | 4 |
| Hyde | 100 | 208 | 165 | 473 | 28 | 83 | 109 | 112 | 81 | 40 | 10 | 4 | 6 |
| J. A. Andrew. | 105 | 211 | 269 | 585 | 48 | 122 | 133 | 125 | 84 | 45 | 16 | 10 | 2 |
| Lawrence | 244 | 248 | 376 | 868 | 81 | 178 | 158 | 212 | 145 | 67 | 22 | 5 | |
| Lewis | 135 | 182 | 178 | 495 | 11 | 60 | 105 | 148 | 95 | 54 | 18 | 3 | 1 |
| Lincoln | 83 | 82 | 113 | 278 | 16 | 38 | 62 | 62 | 60 | 27 | 7 | 5 | 1 |
| Lowell | 209 | 294 | 415 | 918 | 86 | 210 | 196 | 193 | 135 | 64 | 20 | 11 | 3 |
| Lyman | 92 | 137 | 174 | 403 | 31 | 69 | 75 | 87 | 80 | 42 | 16 | 2 | 1 |
| Martin | 40 | 45 | 46 | 131 | 14 | 30 | 24 | 25 | 20 | 15 | 2 | 1 | |
| Mather | 118 | 122 | 290 | 530 | 37 | 83 | 131 | 128 | 68 | 52 | 19 | 10 | 2 |
| Minot | 57 | 59 | 112 | 228 | 31 | 43 | 51 | 52 | 34 | 12 | 4 | 1 | |
| Mt. Vernon | 54 | 53 | 75 | 182 | 25 | 27 | 33 | 39 | 37 | 16 | 5 | | |
| Norcross | 142 | 222 | 217 | 581 | 67 | 103 | 115 | 114 | 74 | 67 | 30 | 10 | 1 |
| Phillips | 34 | 159 | 185 | 378 | 50 | 74 | 76 | 58 | 66 | 33 | 15 | 4 | 2 |
| Prescott | 99 | 147 | 153 | 399 | 26 | 65 | 94 | 87 | 67 | 35 | 13 | 6 | 6 |
| Prince | 65 | 67 | 110 | 242 | 2 | 24 | 72 | 54 | 28 | 40 | 16 | 4 | 2 |
| Quincy | 187 | 225 | 259 | 671 | 75 | 118 | 138 | 151 | 100 | 53 | 26 | 6 | 4 |
| Rice | 92 | 125 | 103 | 320 | 8 | 47 | 80 | 89 | 58 | 29 | 8 | | 1 |
| Sherwin | 93 | 150 | 215 | 458 | 51 | 81 | 101 | 97 | 58 | 46 | 13 | 9 | 2 |
| Shurtleff | 106 | 103 | 111 | 320 | 16 | 58 | 67 | 71 | 68 | 27 | 9 | 2 | 2 |
| Stoughton | 70 | 90 | 115 | 275 | 30 | 55 | 64 | 56 | 47 | 14 | 7 | | 2 |
| Thos. N. Hart, | 133 | 180 | 154 | 467 | 17 | 88 | 121 | 96 | 85 | 40 | 12 | 8 | |
| Tileston | 19 | 15 | 45 | 79 | 14 | 12 | 16 | 24 | 11 | 2 | | | |
| Warren | 98 | 94 | 167 | 359 | 11 | 74 | 94 | 65 | 80 | 26 | 6 | 3 | |
| Wells | 187 | 257 | 370 | 814 | 72 | 125 | 195 | 193 | 136 | 67 | 24 | 2 | |
| Winthrop | 52 | 110 | 91 | 253 | 43 | 64 | 56 | 32 | 38 | 9 | 4 | 6 | 1 |
| Totals | 5,941 | 7,967 | 10,652 | 24,560 | 1,932 | 4,426 | 5,347 | 5,397 | 4,087 | 2,185 | 790 | 285 | 112 |
| Percentages | 24.2 | 32.4 | 43.4 | 100 | 7.9 | 18. | 21.7 | 22. | 16.6 | 8.9 | 3.2 | 1.2 | .5 |

PRIMARY SCHOOLS.

Number of Pupils to a Teacher, June 30, 1891.

| Districts. | No. of Teachers. | Av. whole No. of Pupils. | No. of Pupils to a Teacher. | Districts. | No. of Teachers. | Av. whole No. of Pupils. | No. of Pupils to a Teacher. |
|--------------|---------------------|--------------------------------|--------------------------------|-----------------|---------------------|--------------------------------|--------------------------------|
| Adams | 6 | 309 | 51.5 | Henry L. Pierce | 4 | 182 | 45.5 |
| Agassiz | 3 | 184 | 61.3 | Hugh O'Brien | 12 | 711 | 59.2 |
| Allston | 10 | 559 | 55.9 | Hyde | 8 | 468 | 58.5 |
| Bennett | 7 | 348 | 49.7 | J. A. Andrew | 11 | 604 | 54.9 |
| Bigelow | 13 | 684 | 52.6 | Lawrence | 17 | 853 | 50.2 |
| Bowditch | 6 | 293 | 48.8 | Lewis | 10 | 516 | 51.6 |
| Bowdoin | 8 | 317 | 39.6 | Lincoln | 6 | 281 | 46.8 |
| Brimmer | 8 | 357 | 44.6 | Lowell | 16 | 881 | 55.1 |
| Bunker Hill. | 12 | 531 | 44.2 | Lyman | 8 | 394 | 49.2 |
| Chapman | 6 | 317 | 52.8 | Martin | 3 | 128 | 42.6 |
| Ch's Sumner | 9 | 476 | 52.8 | Mather | 11 | 526 | 47.8 |
| Comins | 6 | 304 | 50.7 | Minot | 4 | 225 | 56.2 |
| Dearborn | 12 | 622 | 51.8 | Mt. Vernon | 5 | 180 | 36.0 |
| Dillaway | 7 | 358 | 51.1 | Norcross | 13 | 581 | 44.6 |
| Dudley | 13 | 673 | 51.7 | Phillips | 7 | 378 | 54.0 |
| Dwight | 9 | 524 | 58.2 | Prescott | 8 | 386 | 48.2 |
| Edw. Everett | 7 | 437 | 62.4 | Prince | 4 | 217 | 54.2 |
| Eliot | 8 | 464 | 58.0 | Quincy | 13 | 678 | 52.1 |
| Emerson | 10 | 576 | 57.6 | Rice | 7 | 328 | 46.8 |
| Everett | 10 | 532 | 53.2 | Sherwin | 9 | 449 | 49.8 |
| Franklin | 12 | 615 | 51.2 | Shurtleff | 6 | 326 | 54.3 |
| Frothingham | 9 | 501 | 55.6 | Stoughton | 4 | 274 | 68.5 |
| Gaston | 9 | 470 | 52.2 | Thos. N. Hart . | 9 | 484 | 53.7 |
| Geo. Putnam | 4 | 227 | 56.7 | Tileston | 2 | 75 | 35.0 |
| Gibson | 6 | 297 | 49.5 | Warren | 7 | 361 | 51.6 |
| Hancock | 17 | 967 | 56.9 | Wells | 15 | 850 | 56.6 |
| Harris | 6 | 292 | 48.7 | Winthrop | 6 | 247 | 41.1 |
| Harvard | 12 | 605 | 50.4 | Totals | 470 | 24,422 | 52.0 |

SCHOOL DOCUMENT NO. 17-1891.

BOSTON PUBLIC SCHOOLS.

LIST OF AUTHORIZED TEXT AND REFERENCE BOOKS,

AND

SUPPLEMENTARY READING BOOKS,

FOR

SCHOOL YEAR 1891-92.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

IN SCHOOL COMMITTEE, BOSTON, Sept. 8, 1891.

Ordered, That six hundred copies of the list of authorized text-books, reference-books, and supplementary reading books for 1891–92 be printed.

Attest:

PHINEAS BATES,

Secretary.

TEXT-BOOKS.

PRIMARY SCHOOLS.

Third Class. — New Franklin Primer and First Reader. Munroe's Primary Reading Charts.

Second Class. - Franklin Second Reader. Franklin

Advanced Second Reader. First Music Reader.

First Class. — Franklin Third Reader. 1 New Franklin

Third Reader. First Music Reader.

Upper Classes. — 2 Franklin Primary Arithmetic. First Lessons in Natural History and Language, Parts I. and II. Child's Book of Language, Nos. 1, 2, 3. [By J. H. Stickney.]

All the Classes. — American Text-books of Art Education. First Primary Music Chart. Prang's Natural History

Series, one set for each building.

Magnus & Jeffries's Color Chart; "Color Blindess," by Dr. B. Joy Jeffries. — One copy of the chart and one copy

of the book for use in each Primary-School building.

Normal Music Course in the Rice Training School and in the schools of the third and sixth divisions. National Music Course (revised edition) in the schools of the first and second divisions.

GRAMMAR SCHOOLS.

Sixth Class. — Franklin Advanced Third Reader. ³ Metcalf's Language Lessons. ⁴ Warren's Primary Geography. Intermediate Music Reader. Franklin Elementary Arithmetic. ⁵ Greenleaf's Manual of Mental Arithmetic. Worcester's Spelling-Book. Blaisdell's Physiology of Little Folks.

¹ To be furnished at the discretion of the Committee on Supplies.
² Each Primary-School building occupied by a first or second class to be supplied with one set of the Franklin Primary Arithmetic; the number in a set to be sixty, or, if less be needed, less than sixty; the Committee on Supplies are authorized to supply additional copies of the book at their discretion, if needed.
³ One set to be supplied for every two rooms of the fifth and sixth classes.
⁴ Swinton's Introductory Geography allowed in Charlestown Schools.
⁵ To be used in the manner recommended by the Board of Supervisors in School Document No. 14, 1883; one set of sixty copies to be supplied for the classes on each floor of a Grammar-School building occupied by pupils in either of the four lower classes, and for each colony of a Grammar School.

Fifth Class. — Franklin Intermediate Reader. 1 New Franklin Fourth Reader. 2 Metcalf's Language Lessons. Franklin Elementary Arithmetic. ³ Greenleaf's Manual of Mental Arithmetic. ⁴ Warren's Primary Geography. Intermediate Music Reader. Worcester's Spelling-Book. ⁵ Stowell's A Healthy Body.

Fourth Class. — Franklin Fourth Reader. 1 New Franklin Fourth Reader. ² Metcalf's Language Lessons. Worcester's Comprehensive Dictionary. Franklin Written Arithmetic. ³ Greenleaf's Manual of Mental Arithmetic. ⁴ Warren's Common-School Geography. Intermediate Music Reader. Worcester's Spelling-Book. ⁵ Stowell's A Healthy Body.

Third Class. — Franklin Fifth Reader. 1 New Franklin Fifth Reader. Franklin Written Arithmetic. ³ Greenleaf's Manual of Mental Arithmetic. 4 Warren's Common-School

Geography. Swinton's New Language Lessons. Worcester's Comprehensive Dictionary. Higginson's History of the United States. 6 Fourth Music Reader, [Revised edition. 7 Smith's Elementary Physiology and Hygiene.

Second Class. — Franklin Fifth Reader. ¹New Franklin Fifth Reader. Franklin Written Arithmetic. 4 Warren's Common-School Geography. Tweed's Grammar for Common Schools. Worcester's Comprehensive Dictionary. ⁶ Fourth Music Reader, [Revised edition.] ⁷ Smith's Elementary Physiology and Hygiene.

First Class. — Franklin Sixth Reader. Masterpieces of American Literature (Houghton, Mifflin, & Co.). Franklin Written Arithmetic. Meservey's Book-keeping, Single Entry. 4 Warren's Common-School Geography. Tweed's Grammar for Common Schools. Worcester's Comprehensive Dictionary. 8 Higginson's History of the United States. Stone's History of England. Cooley's Elements of

¹ To be furnished at the discretion of the Committee on Supplies.

² One set to be supplied for every two rooms of the fifth and sixth classes.

³ To be used in the manner recommended by the Board of Supervisors in School Document No. 14, 1883; one set of sixty copies to be supplied for the classes on each floor of a Grammar-School building occupied by pupils in either of the four lower classes, and for each colony of a Grammar School.

⁴ The revised edition to be furnished at the discretion of the Committee on Supplies to schools where this book is used. Swinton's Grammar-School Geography allowed in Charlestown Schools.

⁵ To be supplied to pupils of the fifth class only — said books to be used half a year

⁵To be supplied to pupils of the fifth class only — said books to be used half a year in the fifth class, and half a year in the fourth class.

⁶The revised edition to be supplied as new books are needed.

⁷It is understood that the books now in the second class are to be used half a year

in that class, and the other half-year in the third class.

* For the school-year 1891-92.

Philosophy. ¹ Fourth Music Reader, [Revised edition.] Mowry's Elements of Civil Government.

Fifth and Sixth Classes. - First Lessons in Natural

History and Language, Parts III. and IV.

All Classes. — American Text-books of Art Education. Writing-Books: Duntonian Series; Payson, Dunton, and Scribner's; Harper's Copy-Books; Appleton's Writing-Books. Child's Book of Language; and Letters and Lessons in Language, Nos. 1, 2, 3, 4. [By J. H. Stickney.] Prang's Aids for Object Teaching, "Trades," one set for each building.

Normal Music Course in the Rice Training School and the schools of the third and sixth divisions. National Music Course (revised edition) in the schools of the first and second

divisions.

HIGH SCHOOLS.

English. — Abbott's How to Write Clearly. Hill's or Kellogg's Rhetoric. Meiklejohn's English Language. Scott's Lady of the Lake. Selections from Addison's Papers in the Spectator, with Macaulay's Essay on Addison. Irving's Sketch-Book. Trevelyan's Selections from Macaulay. Hales's Longer English Poems. Shakespeare, — Rolfe's or Hudson's Selections. Selections from Chaucer: Selections from Milton, [Clarendon Press Edition. Vol. I.] Worcester's

Comprehensive Dictionary.

Latin. — Allen & Greenough's Latin Grammar [Roxbury, W. Roxbury, and Brighton High Schools]. Harkness's Latin Grammar [English, Girls', Dorchester, Charlestown, and East Boston High Schools]. Harkness's New Easy Latin Method. Gildersleeve's Latin Primer. Collar & Daniell's Beginners' Latin Book [Roxbury, West Roxbury, and Brighton High Schools]. Harkness's Cæsar. Allen & Greenough's Cæsar [Roxbury, West Roxbury, and Brighton High Schools]. Lindsey's Cornelius Nepos. Chase's, Frieze's, or Greenough's Virgil, or any edition approved by the Committee on Text-Books. Greenough's or Harkness's Cicero. Chase's or Lincoln's Horace, or any edition approved by the Committee on Text-Books.

History. — Myer's General History. Sheldon's General

History. Fiske's Civil Government.

¹ The revised edition to be supplied as new books are needed.

Mythology. — Berens's Hand-book of Mythology.

Mathematics. — Meservey's Book-keeping. Bradbury & Emery's Academic Algebra. Wentworth & Hill's Exercises in Algebra. Bradbury's Elementary Geometry, or Chauvenet's Geometry, or Wells's Geometry. Greenleaf's Trigonometry. ² Metric Apparatus.

Physics. — Cooley's New Text-book of Physics. Avery's

Physics, or Gage's Introduction to Physical Science. Gage's

Laboratory Manual of Physics.

Astronomy. — Sharpless & Phillips's Astronomy.

Chemistry. — Williams's Chemistry. Williams's Laboratory Manual. Shepard's Chemistry. Eliot & Storer's Elementary Manual of Chemistry, edited by Nichols. Eliot & Storer's Qualitative Analysis. Hill's Lecture Notes on Qualitative Analysis. Tables for the Determination of Common Minerals [Girls' High School]. White's Outlines of Chemical Theory. A Record of Laboratory Work [D. C. Heath & Co.].

Botany. — Gray's School and Field Book of Botany. Zoölogy. — Morse's Zoölogy and Packard's Zoölogy.

Physiology. — Hutchison's Physiology. Blaisdell's Our Bodies and How we Live.

Drawing. — American Text-books of Art Education.

Music. — Eichberg's High-School Music Reader berg's Girls' High-School Music Reader [Girls' High School].

LATIN SCHOOLS.

Latin.—White's Abridged Lexicon. Harkness's Grammar. Harkness's Reader. Harkness's New Easy Latin Method. Harkness's Prose Composition, or Allen's Latin Composition. Harkness's Cæsar. Lindsey's Cornelius Nepos. Greenough's Catiline of Sallust. Lincoln's Ovid. Greenough's Ovid. Greenough's Virgil. Greenough's or Harkness's Orations of Cicero. Smith's Principia Latina, Part II.

Greek. - Liddell & Scott's Abridged Lexicon. Goodwin's Grammar. White's Lessons. Jones's Prose Composition. Goodwin's Reader. The Anabasis of Xenophon. Boise's Homer's Iliad. Beaumlein's Edition of Homer's Iliad. Seymour's School Iliad [Girls' Latin School].

¹ This book is not intended to, and does not in fact, displace any text-book now in use, but is intended merely to furnish additional problems in algebra.

² Not exceeding \$15 for each school.

English. — Soule's Hand-book of Pronunciation. Hill's General Rules for Punctuation. Tweed's Grammar for Common Schools (in fifth and sixth classes). Hawthorne's Wonder Book. Hawthorne's Tanglewood Tales. Plutarch's Lives of Famous Greeks and Romans. Macaulay's Lays of Ancient Rome. Higginson's History of the United States. Hughes's Tom Brown's School-Days at Rugby. Dana's Two Years Before the Mast. Charles and Mary Lamb's Tales from Shakespeare, [Revised Edition, Houghton, Mifflin, & Co.] Scott's Ivanhoe. Hawthorne's True Stories. Greene's Readings from English History. ¹ Church's Stories from Homer. ¹Church's Stories of the Old World. Selections from American Authors, - Franklin, Adams, Cooper, and Longfellow. American Poems, with Biographical Sketches and Notes. Irving's Sketch-Book. Selections from Addison's Papers in the Spectator. Ballads and Lyrics. Hales's Longer English Poems. Three plays of Shakespeare, - Rolfe's or Hudson's Selections.

History. — Leighton's History of Rome. Smith's Smaller History of Greece. Long's or Ginn & Heath's Classical Atlas. Smith's Smaller Classical Dictionary, - Student's Series.

Mythology. — Bulfinch's Age of Fable. Geography. — Geikie's Primer of Physical Geography.

Warren's Common School Geography.

Physiology. — Macé's History of a Mouthful of Bread. Foster's Physiology (Science Primer). Blaisdell's Our Bodies and How we Live.

Botany. — Gray's School and Field Book of Botany. Zoölogy. — Morse's Zoölogy and Packard's Zo logy.

Mineralogy. — Tables for the Determination of Common

Minerals [Girls' Latin School].

Mathematics. — The Franklin Written Arithmetic. Bradbury & Emery's Academic Algebra. ² Wentworth & Hill's Exercises in Algebra. 3 Wentworth & Hill's Exercise Manual in Arithmetic. Chauvenet's Geometry. Lodge's Elementary Mechanics.

Physics.— Arnott's or Avery's Physics, or Gage's Physics. Drawing. — American Text-books of Art Education.

¹ No more copies of Church's Stories from Homer to be purchased, but as books are worn out their place to be supplied with Church's Stories of the Old World.

² This book is not intended to, and does not in fact, displace any text-book now in use, but is intended merely to furnish additional problems in algebra.

³ This book is not intended to, and does not in fact, displace any text-book now in use, but is intended merely to furnish additional problems in arithmetic.

Music. — Eichberg's High-School Music Reader. Eichberg's Girls' High-School Music Reader [Girls' Latin School].

LATIN AND HIGH SCHOOLS.

French. — Keetel's Elementary Grammar. Keetel's Analytical French Reader. Super's French Reader. ¹ Sauveur's Petites Causeries. Hennequin's Lessons in Idiomatic Gasc's French Dictionary. French. Erckmann-Chatrian's Le Conscrit de 1813. Érckmann-Chatrian's Madame Bôcher's College Series of French Plays. Nouvelles Genevoises. Souvestre's Au Coin du Feu. Racine's Andromaque. Racine's Iphigénie. Racine's Athalie. lière's Bourgeois Gentilhomme. Molière's Precieuses Ridi-Corneille's Les Horaces. Corneille's Cid. Herrig's La France Littéraire. Roemer's French Course, Vol. II. Ventura's Peppino. Halévy's L'Abbé Constantin. La Fontaine's Fables. About's La Mère de la Marquise. Daudet's Siège de Berlin. Daudet's Extraits. Daudet's La Belle Nivarnaise. La Nervaine de Collette. Marcillac's Manuel d'Histoire de la Littérature Française [Fourth-year class in High Schools]. Materials for French Composition [Grandgent]. Abeille [A. France]. Colomba [P. Merimée]. Historiettes Modernes [edited by C. Fontaine].

German.— Whitney's German Dictionary. Heath's German Dictionary. Whitney's Grammar. Sheldon's German Grammar. Collar's Eysenbach. Otto's or Whitney's Reader. Brandt's German Reader. Der Zerbrochene Krug. Schiller's Wilhelm Tell. Schiller's Maria Stuart. Goethe's Hermann und Dorothea. Putlitz's Das Herz Vergessen. Grimm's Märchen. Goethe's Prose. Schiller's Prose. Stein's German Exercises. Heine's Die Harzreise. Im Zwielicht, Vols. I. and II. Traumerein. Buckheim's Ger-

man Poetry for Repetition.

NORMAL SCHOOL TEXT-BOOKS.

The text-books used in this school shall be such of the text-books used in the other public schools of the city as are

² No more copies of Whitney's German Dictionary to be purchased.

¹ To be furnished as new French Readers are needed. The use of the book confined for this year to the English, Charlestown, Roxbury, and West Roxbury High Schools.

needed for the course of study, and such others as shall be authorized by the Board.

Normal Music Course.

HORACE MANN SCHOOL TEXT-BOOKS.

Such text-books shall be supplied to the Horace Mann School as the committee on that school shall approve.

EVENING HIGH SCHOOL TEXT-BOOKS.

Benn Pitman's Manual of Phonography. Reporter's Companion. The Phonographic Reader. The Reporter's First

Reader. Bradbury's Elementary Geometry.

The text-books used in this school shall be such of the text-books authorized in the other public schools as are approved by the Committee on Evening Schools and the Committee on Supplies.

East Boston Branch. — Graded Lessons in Shorthand.

Parts 1 and 2, by Mrs. Mary A. Chandler.

EVENING ELEMENTARY SCHOOL TEXT-BOOKS.

Munroe's Charts. Franklin Primer. Franklin Reader. Stories of American History. Harper's Introductory Geography. The Franklin Elementary Arithmetic. The Franklin Written Arithmetic. ¹ Andersen's Märchen. Writing-books, Plain Copy-books, and such of the text-books authorized in the other public schools as are approved by the Committee on Evening Schools and the Committee on Supplies.

SCHOOLS OF COOKERY.

Boston School Kitchen Text-book, by Mrs. D. A. Lincoln.

¹ In schools in which the English language is taught to German pupils.

REFERENCE-BOOKS.

PRIMARY SCHOOLS.

Worcester's Comprehensive Dictionary. National Music Teacher. Munroe's Vocal Gymnastics. Lessons in Color (one copy for each Primary-School teacher's desk). White's Oral Lessons in Number (one copy for each Primary-School teacher's desk). Smith's Primer of Physiology and Hygiene (one copy for each Primary-School teacher's desk). Blaisdell's Physiology for Little Folks (one copy for the desk of each teacher of the first class).

Observation Lessons in the Primary Schools, (Hopkins)

(one copy for each Primary-School teacher's desk).

Simple Object Lessons (two series), by W. Hewitt Beck. Natural History Object Lessons, by G. Ricks (one set of books of each title for each Primary-School teacher's desk). Enebuske's Progressive Gymnastic Day's Orders (one copy for the desk of each teacher). Cutler's Primary Manual Training (one copy for the desk of each teacher of the first class).

GRAMMAR SCHOOLS.

Appleton's American Encyclopædia or Johnson's Encyclopædia. Chambers's Encyclopædia. Anthon's Classical Dictionary. Thomas's Dictionary of Biography and Mythology.

Worcester's Quarto Unabridged Dictionary. Webster's Quarto Unabridged Dictionary. Webster's National Picto-

rial Dictionary.

Lippincott's Gazetteer. Johnson's Atlas. Reclus's Earth. Reclus's Ocean. Reclus's Bird's-Eye View of the World. Flammarion's Atmosphere. Weber's Universal History. Bancroft's History of the United States. Battle Maps of the Revolution. Palfrey's History of New England. Frothingham's Rise of the Republic. Lossing's Field Book of the Revolution. Shurtleff's Topographical History of Boston. Frothingham's Siege of Boston. Lingard's History of Eng-

land. Smith's Primer of Physiology and Hygiene (one copy for the desk of each teacher of the fifth and sixth classes). Frye's Geography Teaching (one copy for the desk of each teacher of the fifth and sixth classes). Fables and Anecdotes and Stories for Teaching Composition (one copy for the desk of each teacher of the sixth class). Champlin's Young Folks' Cyclopædia of Persons and Places. Champlin's Young Folks' Cyclopædia of Common Things. MacCoun's Historical Geography of the United States. MacCoun's Historical Charts of the United States. Bulfinch's Age of Fable.

Goold-Brown's Grammar of English Grammars. Wilson's Punctuation. Philbrick's Union Speaker. Methods of Teaching Geography (one copy for each teacher of Geography). Posse's Swedish System of Gymnastics. Enebuske's Progressive Gymnastic Day's Orders (one copy for the desk of each teacher). Guides for Science Teaching—published by D. C. Heath & Co.—(one set to be supplied to each Gram-

mar School).

First Classes. — Physiography (Longmans & Co.). Copies for teachers' desks.

Second Classes. — Harper's Cyclopædia of United States

History.

Maps and Globes. — Cutter's Physiological Charts. Charts of the Human Body (Milton Bradley & Co.). White's Manikin. Cornell's Series Maps, or Guyot's Series Maps, Nos. 1, 2, 3 (not exceeding one set to each floor). Hughes's Series of Maps. Joslyn's 15-inch Terrestrial Globe, on Tripod (one for each Grammar School). 9-Inch Hand Globe, Loring's Magnetic (one for each Grammar-School room). Cosmograph. O. W. Gray & Son's Atlas (to be furnished as new atlases are needed.)

HIGH SCHOOLS.

For use in each class-room where history is taught: Sanderson's Epitome of the World's History. Labberton's Historical Atlas and General History. Tillinghast's Ploetz's Epitome of Ancient, Mediæval, and Modern History. Adams's Manual of Historical Literature. Fisher's Outlines of Universal History. McCarthy's History of the World.

LATIN AND HIGH SCHOOLS.

Lingard's History of England. Harper's Latin Lexicon. Liddell & Scott's Greek Lexicon, unabridged. Eugène's French Grammar. Labberton's Historical Atlas and General History (one book for the desk of each teacher). Guyot's and Cameron's Maps of the Roman Empire, Greece, and Italy. Strang's English Lessons (for use on teachers' desks). Reclus's Bird's-Eye View of the World. Enebuske's Progressive Gymnastic Day's Orders (one copy for the desk of each teacher).

NORMAL SCHOOL.

Observation Lessons in Primary Schools (Hopkins) (one set). Enebuske's Progressive Gymnastic Day's Orders (one copy for the desk of each teacher).

NORMAL AND HIGH SCHOOLS.

Charts of Life. Wilson's Human Anatomical and Physiological Charts. Hough's American Woods.

BOOKS FOR SUPPLEMENTARY READING.

BOYS' LATIN SCHOOL.

[45 copies of each book.]

Moss's First Greek Reader. Tomlinson's Latin for Sight Reading. Walford's Extracts from Cicero, Part I. Jackson's Manual of Astronomical Geography. Ritchie's Fabulae Faciles.

GIRLS' LATIN SCHOOL.

Sheldon's Greek and Roman History. Ritchie's Fabulae Faciles.

LATIN AND HIGH SCHOOLS.

Books required for admission to Harvard College.

A list of suitable books, carefully prepared under the direction of the Committee on Text-Books, is presented to the Board for adoption. After this list has been adopted, a master may make requisition on the Committee on Supplies for one set (of not more than thirty-five copies) of a book. This committee, after the

approval of the Committee on Text-Books has been obtained, will purchase the books and send them to the school for permanent use. No book will be purchased until called for in the manner described.

Sets of not more than thirty-five copies — less when the classes are small — are to be purchased for the Latin and High Schools, except the Dorchester High School, which is otherwise provided for. One set is to be allowed for three class-rooms. An extra set is to be allowed for use in more than three and less than six class-rooms in one school; and so on in that ratio.

English. — Barnes's History of Ancient Peoples; Church's Stories from the East, from Herodotus; Church's Story of the Persian War, from Herodotus; Church's Stories from the Greek Tragedians; Kingslev's Greek Heroes; Abbott's Lives of Cyrus and Alexander; Froude's Cæsar; Forsythe's Life of Cicero; Ware's Aurelian; Cox's Crusades; Masson's Abridgment of Guizot's History of France; Scott's Abbot; Scott's Monastery; Scott's Talisman; Scott's Quentin Durward; Scott's Marmion (Rolfe's Student Series); Scott's Lay of the Last Minstrel (Rolfe's Student Series); Kingsley's Hereward; Kingsley's Westward Ho; Melville's Holmby House; Macaulay's Essay on Frederic; Macaulay's Essay on Clive; Macaulay's Essay on Dr. Johnson; Motley's Essay on Peter the Great; Thackeray's Henry Esmond; Thackeray's The Virginians; Thackeray's The Four Georges; Dickens's Tales of Two Cities; George Eliot's Silas Marner; Irving's Alhambra; Irving's Bracebridge Hall; Miss Buckley's Life and Her Children; Miss Buckley's Winners in Life's Race; Bulfinch's Age of Fable (revised edition); Bulfinch's Age of Chivalry; Bulfinch's Legends of Charlemagne; The Boy's Froissart; Ballads and Lyrics; Vicar of Wakefield; Essays of Elia; Tennyson's Selected Poems (Rolfe's Student Series); Tennyson's Elaine; Tennyson's In Memoriam; Byron's Prisoner of Chillon; Goldsmith's Deserted Village; Goldsmith's Traveller; Coleridge's Ancient Mariner; Wordsworth's Excursion; Monroe's Sixth Reader; Webster — Section 2 [Annotated English Classics, Ginn & Co.]; Wordsworth's Poems - Section 2 [Annotated English Classics, Ginn & Co.]; Sheldon's Greek and Roman History; Monroe's Fifth Reader (old edition); The Students' Series of English Classics [Leach, Shewell, & Sanborn].

Latin. — Gradatim for sight reading [Ginn & Co.].

French. — St. German's Pour une Épingle; Achard's Le Clos Pommier; Feuillet's Roman d'un Homme Pauvre; Dumas's La Tulipe Noire; Vigny's Cinq Mars; Lacombe's La Petite Histoire du Peuple Français.

German. — Andersen's Märchen; Simmondson's Balladenbuch; Krummacher's Parabeln; Goethe's Iphigenie auf Tauris; Goethe's Prose; Schiller's Jungfrau von Orleans; Schiller's Prose; Boisen's

German Prose: Bernhardt's Novellen Bibliothek.

GRAMMAR SCHOOLS.

PERMANENT SUPPLEMENTARY READING.

One set for three class-rooms. An extra set allowed whenever a book is assigned for use in more than three and less than six class-rooms; and so on in that ratio.

It is to be understood that hereafter, when Hooker's Child's Book of Nature is to be purchased and furnished to schools, it shall be bound in parts.

It is to be understood that hereafter, when Guyot's Introduction to Geography is to be replaced with new books, Scribner's Geographical Reader shall be furnished.

It is to be understood that copies of Early England, Harper's Half-Hour Series, and six stories from Arabian Nights, now in stock, are to be used, but that no more copies are to be purchased.

CLASS VI.

60 copies for a set. — Seven Little Sisters, first half-year. Hooker's Child's Book of Nature; those chapters of Parts I. and II. which will supplement properly the observational studies of plants and animals, and those chapters of Part III., on air, water, and heat, which will aid the instruction in Geography. Our World Reader, No. 1. Our World, No. 1; the reading to be kept parallel with the instruction in Geography through the year. Poetry for Children; selections appropriate for reading and recitation. Stories of American History; for practice in reading at sight, and for material for language lessons. 30 copies for a set. — Wood's Natural History Reader, No. 3.

CLASS V.

60 copies for a set. — Each and All, second half-year. This is simple, interesting class-reading, which will aid the geography, and furnish material for both oral and written language lessons. Guyot's Introduction to Geography; the reading to be kept parallel with the instruction in Geography through the year. Hooker's Child's Book of Nature, and Poetry for Children; as in Class VI. Robinson Crusoe. 30 copies for a set. — Frye's Brooks and Brook Basins. Wood's Natural History Readers, Nos. 4 and 5. American History Stories, Vol. IV. [Mara L. Pratt].

CLASS IV.

60 copies for a set. — Hooker's Child's Book of Nature, and Poetry for Children; as in Classes VI. and V. Readings from Nature's Book (revised edition). Robinson Crusoe. 30 copies for a set. — King's Geographical Reader, No. 2. Wood's Natural History Reader, No. 6. Eggleston's A First Book in American History.

¹ No more copies of Our World, No. 1, to be purchased.

CLASS III.

60 copies for a set. — Hooker's Child's Book of Nature; as supplementary to oral lessons. American Poems, with Biographical Sketches and Notes; appropriate selections therefrom.

CLASS II.

60 copies for a set. — Selections from American authors; as in part collateral to the United States History. American Poems; appropriate selections therefrom.

CLASS I.

60 copies for a set. — Selections from American authors. Early England — Harper's Half-Hour Series, Nos. 6 and 14. American Poems; selections therefrom. 10 copies for a set. — Green's Readings from English History. 30 copies for a set. — Philips's Historical Readers, Nos. 1, 2, 3, 4. Geikie's Elements of Physical Geography.

ANY CLASS.

60 copies for a set. — Six stories from the Arabian Nights. Jackson's Manual of Astronomical Geography; one set of 60 copies to be supplied to each Grammar School.

CIRCULATING LIBRARY PLAN FOR GRAMMAR SCHOOLS.

The object of the plan is not only to aid pupils to cultivate a taste for good and wholesome reading, but, by furnishing them with good books for home reading, to provide additional material for their work in composition and the study of English literature.

Sets of suitable books will be purchased, each set consisting of sixty books.

The sets will be distributed among the first eight school divisions during the present year, — the ninth division being already well supplied with books for supplementary reading.

Each set will be put in a strong, well-made box, with handles; the boxes to be made for the purpose, each set exactly fitting its box; the division to which it belongs, and the kind of books it contains, to be marked upon each box.

A report card, upon which the principal shall note the condition of books when received, will accompany each set. The principal of the school shall receive the books, note on the report their condition, and see to their distribution in the classes.

The sets of books in each division will form a circulating library in that division, to be moved from school to school at stated periods by the regular supply team. The transfer of boxes will take place during the months of December and March.

[Sets of not more than sixty copies of one book.]

Zigzag Journeys in Europe (revised edition); Zigzag Journeys in the Orient (revised edition); Scudder's Boston Town; Drake's The Making of New England; Towle's Pizarro; Towle's Vasco da Gama; Towle's Magellan; Towle's Heroes and Martyrs of Invention; Fairy Land of Science; Hawthorne's True Stories; Higginson's Young Folks' Book of Explorers; Scott's Ivanhoe; Longfellow's Evangeline; Little Folks in Feathers and Fur; What Mr. Darwin Saw in his Voyage around the World in the Ship Beagle; Muloch's A Noble Life; M. E. Dodge's Hans Brinker; Lambert's Robinson Crusoe; Lamb's Tales from Shakespeare (revised edition, Houghton, Mifflin, & Co.); Abbott's Jonas on a Farm in Summer; Smiles's Robert Dick, Geologist and Botanist; Eyes Right; Alcott's Little Men; Alcott's Little Women; Stoddard's Dab Kinzer; Scott's Kenilworth; Tom Brown's School-Days at Rugby; Abbott's Mary Queen of Scots; Abbott's Charles I.; Taylor's Boys of Other Countries; How Marjory Helped; Little People in Asia; Gilman's Magna Charta Stories; Overhead; Yonge's Lances of Linwood; Memory Gems; Geographical Plays; Ten Boys Who Lived on the Road from Long Ago till Now; Scott's Tales of a Grandfather; Hayes's Cast Away in the Cold; Sharp Eyes and other Papers; Lessons on Practical Subjects; Stories of Mother Nature; Play Days; Jackanapes; Children's Stories of American Progress; Little Lord Fauntleroy; Pilgrims and Puritans; The Patriotic Reader; Ballou's Footprints of Travel; The Crofton Boys; Black Beauty; The King of the Golden River; Water Babies; Hans Andersen's Fairy Tales first and second series; The Lady of the Lake; Wright's Nature Readers, Nos. 1, 2, and 3; Tanglewood Tales; Wonder Book; Summer Holiday in Europe (Blake); Lost Jewel (Spofford); Hawthorne, American Classics for Schools (Houghton, Mifflin, & Co.).

PRIMARY SCHOOLS.

PERMANENT SUPPLEMENTARY READING.

One set for three class rooms. An extra set allowed whenever a book is assigned for use in more than three and less than six class-rooms; and so on in that ratio. Not more than sixty copies for a set.

¹Easy Steps for Little Feet. ¹Popular Tales — First and Second Series. Parker and Marvel's Supplementary Reading (First Book). Tweed's Graded Supplementary Reading. Modern Series Primary Reading, Part I. An Illustrated Primer (D. C. Heath & Co.). Class 1. — Scudder's Book of Fables.

¹The books of the above titles in stock to be used, but no more copies to be purchased.

CIRCULATING SUPPLEMENTARY READING.

[For Primary Schools and Ungraded Classes.]

Sets of books will be purchased, each set consisting of not more than thirty books.

The sets will be distributed among the nine school divisions.

Each set will be put into a strong, well-made box, with handles; the boxes to be made for the purpose, each set exactly fitting its box; the division to which it belongs, and the kind of books it contains, to be marked upon each box.

A report card, upon which the teacher shall note the condition of books when received, will accompany each set. The head teacher of the school shall receive the books, note on the report their condition, and see to their distribution in the classes.

Each book will be covered with cloth, and stamped "City Prop-

erty," with the date of its introduction into the schools.

The sets of books in each division will form a circulating library in that division, to be moved from school to school by the boys of the first class, at stated periods, as directed. When practicable, each division is to form one circuit; when not practicable, two or more circuits shall be formed.

For instance, the Third Division will consist of two circuits:—
1. Somerset-st. School, Anderson-st. School, Phillips-st. School, Blossom-st. School, Poplar-st. School, Chardon-court School.

2. Cushman School, Sheafe-st. School, Snelling-pl. School,

Charter-st. School, North Bennet-st. Ungraded Classes.

It will be seen that the distance between two schools is so short that the larger boys can easily carry the books; so that they will be conveyed from school to school without expense to the city.

The books shall be in the hands of pupils only when used under the immediate direction of the teacher. They are never to be used in copying, or to be kept in the pupils' desks. A set of wellbound books will last from three to five years if properly used and handled.

In order to keep the supply sufficient to meet the wants of the schools, new sets may be duly approved and purchased each year, or sets may be replaced as the books are worn out.

[Sets of not more than thirty copies.]

First Readers. — Monroe's, Monroe's Advanced First, Appleton's, Harvey's, Eclectic, Sheldon's, Barnes's New National, Sheldon & Co.'s, Harper's, the Nursery Primer, Parker and Marvel's Supplementary Reading — Second Book, Wood's First Natural History Reader, Stickney's First Reader, Stickney's First Reader (new edition), McGuffey's Alternate First Reader, Interstate Primer and First Reader, Davis's Beginner's Book.

Second Readers. — Monroe's, Monroe's Advanced Second, Appleton's, Harvey's, Interstate, Sheldon & Co.'s, Barnes's New National, Analytical, Swinton's New Normal, Stickney's Second Reader (new edition), Harper's, Easy Book (published by Shorey), Turner's Stories for Young Children, Our Little Ones, Golden Book of Choice Reading, When I was a Little Girl, Johonnot's Friends in Feathers and Fur, Woodward's Number Stories, Wood's Second Natural History Reader, Young Folks' Library, Nos. 5 and 6 (Silver, Burdett, & Co.), Davis's Second Reading Book, Book of Folk Stories.

SCHOOL DOCUMENT NO. 18-1891.

ANNUAL REPORT

OF THE

COMMITTEE ON THE HORACE MANN SCHOOL FOR THE DEAF.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

In School Committee, Boston, Oct. 13, 1891.

Accepted, and six hundred copies ordered to be printed.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

The twenty-second year of this school began September 8, 1890, with eighty pupils, — thirty-four boys and forty-six girls. During the year, fourteen pupils were admitted, one died, and four were discharged, making at the close, in June, 1891, eighty-nine pupils, — forty-two boys and forty-seven girls. Of this number, fifty-six were Boston residents, thirty-one came from neighboring towns, and two were from other States.

It is gratifying to note in connection with the statistics of the school, that three of the five pupils who were discharged, left to continue their studies with hearing children. Two of them entered the Berkeley School and one was admitted to the Chauncy Hall School. The following quotations show their standing and work in these schools:—

Mr. James B. Taylor, one of the principals of the Berkeley School, writes as follows: "I am very glad to be able to report so very favorably in regard to both girls. Miss T. and Miss H. have both accomplished the first year's work in our High School course with marked success, averaging between 75 and 95 per cent. on all examinations given to the class, 60 per cent. being the average required for promotion. They have had very little extra attention beyond some care as to position in recitation-room and careful delivery (enunciation) of questions to them when reciting. An occasional explanation has been necessary after school, or at some leisure period. It is always a pleasure to give such slight aid in return for their faithful work and attention. It will always

be a pleasure to further the education of deaf pupils so well prepared to receive it as we have found them."

Mr. M. Grant Daniell, of the Chauncy Hall School, writes:—

"The fact that K. went on with his class and was promoted with the others is in itself enough to show that he did very well indeed. The teachers, of course, took extra pains with him on account of his infirmity, but really, I do not think they were obliged to give any more individual attention to him than to those whose only infirmity is stupidity. We all felt deeply interested in the experiment, and were very anxious to make a success of it, proving that the deaf, after receiving the admirable training that the Horace Mann School affords, may take their place by the side of hearing pupils and go on with them profitably. So far as this one case is concerned, I think there is every reason to be satisfied."

The following note from a former pupil gives personal testimony to the pleasure she derived from studying with hearing girls. One month after she entered the Horace Mann School she had a serious illness that prevented her attendance for more than a year. This and imperfect sight were great hindrances to one who had lost all hearing:—

"I became deaf at the age of eleven years, and started to go to the Horace Mann School in the latter part of November, 1881. I was able to understand quite readily from the lips when I entered the school, as my parents had been very particular that I should not be taught any signs. I went to the school until June, 1886, when I left, and in November of the same year, I, with one of my sisters, went to a convent at Quebec, under the supervision of the teaching sisters belonging to the congregation of Notre Dame. From the first, I got along very well, being able to follow all the lessons with my class, and having no difficulty worth speaking of in understanding my teachers. Of course they were

very careful as to where I stood, but otherwise I was exactly as one of the hearing girls. I took up the study of French simply for the purpose of reading it, though I was able to understand a little of it when it was spoken carefully to me. But I did not try to learn to speak the language, as my English studies were such that they took up all of my time. I contented myself with learning to read and write it. I did not have much trouble in understanding the girls, though sometimes I totally failed to get at the meaning of a sentence spoken by French-Canadians in mixed French and English, and had to ask some of my English friends to help me out.

"My life at Bellevue, as the convent is called, was a very happy one, and I have found that it was of great value to me, as I was thrown with over a hundred different people, no two of which spoke alike. I graduated first of my class, all of whom were hearing girls, in 1889, and I had two gold medals."

Since leaving the convent she has corresponded in French with a Canadian schoolmate who had not learned English.

At the end of the school year, in June, three pupils, a girl and two boys, were awarded certificates by the School Committee. They had completed the course of study arranged for this school, and were prepared to go on with advanced studies with hearing pupils.

Within the last five years eight pupils have been sent directly from this school to private schools for hearing children. The tuition for one of them was given by a friend.

The instances above cited demonstrate that pupils completing the course of study in the Horace Mann School are capable of going on with hearing children.

Have not deaf-mutes equal claim with hearing children to a public-school education?

The majority of them, however, must fall out of the path

of learning, because the size of the classes in the public high schools seems to render it difficult to give to them the slight special attention their infirmity requires, and because the moderate circumstances of parents or friends make it impossible to continue them in private schools. Will it not be possible in the near future to evolve a plan which shall offer to all the privilege of continuing the higher branches? Will it not be possible to provide for the attendance of these scholars at some designated school, and to employ a special teacher who shall render the peculiar and requisite assistance needed to keep them along with hearing children?

The removal of the school to its new building has made it possible to introduce several desirable changes in the plans for work. Hitherto, as a rule, each teacher has had the entire work with a single class. During the latter half of the past year, the teachers in both departments, Primary and Grammar, have had special branches of study for which they were responsible in all the classes of the department. This arrangement, besides giving the pupils an opportunity to read speech upon the lips of a number of persons, has the advantage of allowing each teacher to take the children through the whole course of study in her subject.

In the younger classes, where the pupils have a limited vocabulary, care is required to rouse an ambition to use speech in as great a variety of forms as possible. To accomplish this, an interesting plan was tried with encouraging success during the latter part of the year. Each child was furnished with a card and pencil, and the teachers made a mark for each sentence correctly constructed and spoken. During the month of June, the children in the Primary department received marks varying in number from thirty to three hundred. These sentences were not spoken as a part of the regular school work, but were voluntary statements, expressing their own thoughts and wishes. In the lower

classes of the Grammar department a similar plan was carried out, through the coöperation of parents and friends. Several of these pupils brought evidence from home of having spoken more than two thousand correct sentences in a single month. One of the best results from this plan is the increased confidence of the pupils in their ability to use and understand speech, even when idiomatic language is required to express thought. The best interests of the school required an additional teacher early in the spring, and in March Miss Mabel E. Adams was transferred from the Minot District to this school.

The manual training was under the direction of Mr. J. H. Trybom, whose services were secured to the school by the generous contributions of friends. In his report of the work done by the pupils he says: "The instruction in Sloyd began the third week in September, a modification of the Naäs System by Gustaf Larsson being adopted. Some of the children had already had some lessons in the subject at the Warrenton-Street Sloyd School; these continued their work in the same series. During the year, forty children - twenty-six boys and fourteen girls - have received instruction in Sloyd. They were divided into five classes, each class having two hours' instruction a week. An average of nine models was completed by each pupil. In workmanship the children's work compared favorably with that done in any other school in the city. Specimens of the first twenty models were exhibited at the Manual Training Exhibition in the English High School in April of this year. Last spring, mechanical drawing was added to teach the principles of working drawings. The pupils manifested great interest in the work. Although the instruction in Sloyd was given after the regular school hours, there were, every day, a number of applicants anxious to take the bench of any absent pupil. We are indebted to many kind friends for their remembrance of the needs of some of our pupils.

Several contributions have been made to the children's library.

In the appendix to this report will be found an Act of the Legislature providing for the payment of the travelling expenses of the pupils. The passage of this Act was due to the efforts of Mr. Munroe Chickering.

CAROLINE E. HASTINGS, EMILY A. FIFIELD, CHARLES M. GREEN.

APPENDIX.

EDUCATION OF THE DEAF AND DUMB.

Section 15. Every institution for the instruction of the Institutions for instruction deaf, dumb, and blind, when aided by a grant of money of deaf, dumb, from the state treasury, shall annually make to the board report to the such a report as is required, by sections sixteen and seven-1875, 118. teen of chapter seventy-nine, of other private institutions so aided.

and blind to

Sect. 16. [Section 16 of the Public Statutes is repealed by chapter 239 of the Acts of the year 1888, and the following substituted]: -

Upon the request of the parents or guardians and with the approval of the state board of education, the governor may send such deaf mutes or deaf children as he may deem fit subjects for education, for a term not exceeding ten years in the case of any pupil, to the American Asylum at Hartford in the state of Connecticut, the Clarke Institution for Deaf Mutes at Northampton, or to the Horace Mann School at Boston, or to any other school for deaf mutes in the commonwealth, as the parents or guardians may prefer; and with the approval of the state board he may With the apmake at the expense of the commonwealth such provision board, deaf for the care and education of children, who are both deaf instructed at mutes and blind, as he may deem expedient. In the exer-tutions at the cise of the discretionary power conferred by this act no pense. distinction shall be made on account of the wealth or 1868, 200. poverty of the parents or guardians of such children; no 1871, 300.
1885, 118. such pupil shall be withdrawn from such institutions or 1886, 241. schools except with the consent of the proper authorities 1887, 179. thereof or of the governor; and the sums necessary for the instruction and support of such pupils in such institutions or schools, including all travelling expenses of such pupils

mutes may be certain instipublic ex-

attending such institutions or schools, whether daily or otherwise, shall be paid by the commonwealth: provided, however, that nothing herein contained shall be held to prevent the voluntary payment of the whole or any part of such sums by the parents or guardians of such pupils.

Board to supervise their education, and report concerning the same, etc. 1867, 311, § 3. 1885, 118.

SECT. 17. The board shall direct and supervise the education of all such pupils, and shall set forth in its annual report the number of pupils so instructed, the cost of their instruction and support, the manner in which the money appropriated by the commonwealth therefor has been expended, and such other information as it deems important to be laid before the general court.

Pupils are now sent under the above sections to the Horace Mann School for the Deaf in Boston, the Clarke Institution at Northampton, and the American Asylum at Hartford, Conn.

Blanks for application for admission to these several institutions will be supplied, on request, by the secretary of the State Board of Education.

SCHOOL DOCUMENT NO. 19 — 1891.

ANNUAL REPORT

OF THE

SCHOOL COMMITTEE

OF THE

CITY OF BOSTON, 1891.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

IN SCHOOL COMMITTEE, BOSTON, Dec. 8, 1891.

Ordered, That four thousand copies of the Report of the Committee on the Annual School Report for 1891 be printed.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

The committee appointed to prepare the annual report of the School Committee for the year 1891 respectfully submit the following report: —

The custom of committees on the annual report for several years past seems to us a wise one. We therefore present a general statement of the condition of the schools, and of the most important subjects which have received the attention of the Board during the year. The reports of the Superintendent, Board of Supervisors, and of the regular and special committees of the Board, — some of which are appended to this report — contain much valuable and interesting information, and deserve careful perusal and consideration.

STATISTICS.

It has been the custom to give, in the annual reports, for the purpose of comparison, statistics, showing the number of schools of various grades, the number of teachers employed, and the number of pupils attending the schools. These statistics for the past year are as follows:—

 Whole number of different pupils registered in the public schools during the year ending June 30, 1891:—

| Boys | | | | | | | | | | | 36,218 |
|--|---------|--------|---------|-------|---------|-------|--------|-----|---|---|--------|
| Girls | • | • | • | • | • | • | • | • | • | • | 32,745 |
| Tot | al | | | | | | | | | | 68,963 |
| | | | | DEC | ULAR | 80TT0 | 0.01.0 | | | | |
| | | | | | | | | | | | |
| Norm | | | | | | | | • | • | • | 9 |
| | | _ | | | pupils | | | • | • | • | 171 |
| | Ave | rage : | attend | ance | • | • | • | • | • | ٠ | 164 |
| Latin | and I | High . | School | ls. — | Numb | oer o | f scho | ols | | | 10 |
| | Num | ber o | of tea | chers | | | | | | | 116 |
| | Ave | rage 1 | numbe | er of | pupils | belo | nging | | | | 3,181 |
| | Ave | rage : | attend | ance | • | • | • | • | • | • | 2,994 |
| Gram | mar L | Schoo | ls. — | Num | ber of | scho | ols | | | | 55 |
| | Num | ber o | of tead | chers | | | | | | | 731 |
| | Ave | rage 1 | numbe | er of | pupils | belo | nging | | | | 31,181 |
| | | | | | • | | | | • | | 28,418 |
| Prime | ary Se | chools | 1 | Numb | er of s | schoo | ols. | | | | 468 |
| | Num | ber o | of tead | ehers | | | | | | | 468 |
| | Ave | rage | numbe | er of | pupils | belo | nging | | | | 24,229 |
| | Ave | rage | attend | lance | | • | | • | | | 20,938 |
| Kinde | ergarte | ens. – | – Nur | nber | of sch | ools | | | | | 31 |
| | | | | | | | | | | | 56 |
| | | | | | | | nging | | | | 1,742 |
| | | | | | | | | | | | 1,244 |
| | | | | SPI | ECIAL | scho | ols.1 | | | | |
| Horace Mann School for the Deaf. — Number of teachers, | | | | | | 11 | | | | | |
| | Ave | rage | numbe | er of | pupils | belo | nging | | | | 87 |
| | Ave | rage | attend | lance | • | • | | | | | 75 |

¹ There are five Manual Training Schools and eight Schools of Cookery, but as the pupils of the regular public schools attend them they are not included in these tables.

| Evening Schools. — N | | | | | | | | 17 | |
|---|--------|--------|------|-------|-------|---|---|--------|--|
| Number of teach | hers | | | | | | | 158 | |
| Average number | r of p | pupils | belo | nging | | | | 4,920 | |
| Average attenda | ance | | | | | | | 2,995 | |
| | | | | | | | | | |
| Evening Drawing Scho | ols. – | - Nu | mber | of sc | hools | | | 5 | |
| Number of teac | hers | | | | | | | 24 | |
| Average number | r of p | pupils | belo | nging | | | | 562 | |
| Average attenda | ance | | | | | | | 483 | |
| | | | | | | | | | |
| Spectacle Island School. — Number of teachers 1 | | | | | | | | | |
| Average number | | | 15 | | | | | | |
| Average attenda | ance | | • | | | | | 13 | |
| | | | | | | | | | |
| | RE | CAPIT | ULAT | ION. | | | | | |
| Number of schools: | | | | | | | | | |
| Regular | | | | | | | | 565 | |
| 0 | | | | | | | | | |
| Special | • | • | • | • | • | • | • | 44 | |
| Number of teachers: - | | | | | | | | | |
| In regular schools | | | | | | | | 1.380 | |
| In special schools | | | | | | | | | |
| In special sensors | · | • | • | · | • | • | · | 101 | |
| Average number of pu | pils t | elong | ing: | | | | | | |
| In regular schools | | | | | | | | 60,504 | |
| In special schools | | | | | | | | 5,584 | |
| | | | | | | | | -, | |
| Average attendance: - | _ | | | | | | | | |
| In regular schools | | | | | | | | 53,758 | |
| In special schools | | | | | | | | 3,566 | |
| | | | | | | | | ., | |

EXPENDITURES.

In January, 1891, the School Board forwarded to His Honor the Mayor the estimates of expenses for the public schools for the financial year 1891–92, exclusive of the expenses for furniture, repairs, alterations, and the erection of new school-houses.

The amount asked for was \$1,744,600. In February, 1891, the School Board forwarded to His Honor the Mayor the estimates of expenses for furniture, repairs, and alteration of school-houses for the financial year 1891–92, which called for the sum of \$379,600. The City Council changed the financial year, which hereafter will end January 31, of each year, instead of April 30. The appropriations therefore granted were for the nine months ending Jan. 31, 1892. The City Council granted the School Committee for expenses of the public schools for the nine months, ending Jan. 31, 1892, the sum of \$1,500,000, which was nearly three-fourths of the amount asked for, exclusive of the amount requested for extraordinary repairs.

It has been customary to present, in the annual reports of the Board, the figures of the financial year ending the first day of the preceding May.

The following table shows the expenditures made by the School Committee, the number of pupils, and the average cost per pupil, as incurred by them since the reorganization of the Board — a period of fifteen years: —

| Year. | Expenditures. | Income. | Net Expenditures. | No. of Pupils. | Rate per pupil. |
|---------|----------------|-------------|-------------------|-------------------|-----------------|
| 1876-77 | \$1,525,199 73 | \$21,999 03 | \$1,503,200 70 | 50,308 | \$29 88 |
| 1877-78 | 1,455,687 74 | 30,109 31 | 1,425,578 43 | 51,759 | 27 54 |
| 1878-79 | 1,405,647 60 | 32,145 54 | 1,373,502 06 | 53,262 | 25 79 |
| 1879-80 | 1,416,852 00 | 49,090 28 | 1,367,761 72 | 53,981 | 25 34 |
| 1880-81 | 1,413,763 96 | 73,871 08 | 1,339,892 88 | 54,712 | 24 49 |
| 1881-82 | 1,392,970 19 | 69,344 08 | 1,323,626 11 | 55,638 | 23 79 |
| 1882-83 | 1,413,811 66 | 73,278 56 | 1,340,533 10 | 57,554 | 23 29 |
| 1883-84 | 1,452,854 38 | 79,064 66 | 1,373,789 72 | 58,788 | 23 37 |
| 1884-85 | 1,507,394 03 | 39,048 26 | 1,468,345 77 | 59,706 | 24 59 |
| 1885-86 | 1,485,237 20 | 31,213 34 | 1,454,023 86 | 61,259 | 23 74 |
| 1886-87 | 1,485,343 29 | 33,388 28 | 1,451,955 01 | 62,259 | 23 32 |
| 1887-88 | 1,536,552 99 | 37,092 81 | 1,499,460 18 | 62,226 | 24 10 |
| 1888-89 | 1,596,949 08 | 39,585 52 | 1,557,363 56 | 64,584 | 24 11 |
| 1889-90 | 1,654,527 21 | 39,912 30 | 1,614,614 91 | 66,003 | 24 46 |
| 1890-91 | 1,685,360 28 | 41,209 06 | 1,644,151 22 | 67,022 | 24 53 |

It will be seen from the above table that the expenses of the School Committee the past year, exclusive of repairs, alterations, etc., of school-houses, were 7 cents more per pupil than for the previous year.

The expenses for furniture, repairs, etc., of school buildings have remained about the same per pupil for the past four years.

The following table shows the amount expended for items under the direction of the Public Building Department for repairs needed and furniture furnished the schools for the past fifteen years:—

| Year. | Expenditures, Pub. B'lding Com. | Income. | Net Expenditures, Pub. B'lding Com. | No. of Pupils. | Rate per pupil. |
|-------------|------------------------------------|----------|--|-------------------|-----------------|
| 1876-77 | \$165,876 72 | | \$165,876 72 | 50,308 | \$3 30 |
| 1877-78 | 126,428 35 | | 126,428 35 | 51,759 | 2 45 |
| 1878-79 | 114,015 32 | | 114,015 32 | 53,262 | 2 14 |
| 1879-80 | 98,514 84 | | 98,514 84 | 53,981 | 1 82 |
| 1880-81 | 145,913 55 | \$205 00 | 145,708 55 | 54,712 | 2 66 |
| 1881-82 | 178,008 88 | 247 50 | 177,761 38 | 55,638 | 3 19 |
| 1882-83 | 189,350 83 | 231 00 | 189,119 83 | 57,554 | 3 29 |
| 1883-84 , . | 186,852 18 | 300 00 | 186,552 18 | 58,788 | 3 17 |
| 1884-85 | 198,059 11 | 526 50 | 197,532 61 | 59,706 | 3 31 |
| 1885-86 | 188,435 63 | 137 50 | 188,298 13 | 61,259 | 3 07 |
| 1886-87 | 171,032 71 | 295 92 | 170,736 79 | 62,259 | 2 74 |
| 1887-88 | 243,107 89 | 221 00 | 242,886 89 | 62,226 | 3 90 |
| 1888-89 | 251,736 17 | 153 00 | 251,583 17 | 64,584 | 3 90 |
| 1889-90 | 262,208 75 | 850 20 | 261,358 55 | 66,003 | 3 96 |
| 1890-91 | 263,860 16 | 208 00 | 263,652 16 | 67,022 | 3 94 |

The foregoing tables include all the running expenses of the schools, and form the basis for computing the rate per pupil.

The expenses of the School Committee as compared with the year previous present an increase of \$29,53631. The expenses incurred under the direction of the Superintendent of Public Buildings, for furniture, repairs, etc., of school-houses, were increased \$2,293.61, thereby increasing the total net expenditures \$31,829.92.

In addition to the above-mentioned expenditures, there was expended for new school-houses the sum of \$172,523.90.

NORMAL SCHOOL.

The change in the course in this school from one year to a year and a half, which was made three years ago, and the addition to the corps of teachers of a sub-master and special teachers of drawing and kindergartening, have already produced marked results. Since the changes, two classes have been graduated, one in January, 1890, numbering 97, and one in January, 1891, numbering 65. The last report of the school states: "The wisdom of the changes in the course of instruction is shown in the increased efficiency of the graduates."

There is an increasing demand for teachers possessing the requisite qualifications to fit them for the work in the new departments which have been added to the school curriculum — as, for example, the elementary work in manual training, including sloyd, clay modelling, etc., and in physical training. This must be considered a part of the educational training of our teachers, and for this work we look to our Normal School. In this connection the suggestion contained in the report of the Normal School, of adding another half-year to the term in that school and providing elective courses in special subjects, is, in our judgment, a wise and timely one, and worthy of careful consideration.

An order was introduced into the Board early in the year "that the Normal School be so arranged that young men may enter and join the young women in the same course of study." The Corporation Counsel was requested to give his opinion on the following question: "Is the School Board empowered to admit young men to the Normal School, or must this authority come through the City Council?" The Corporation Counsel sent the following opinion to the Board:—

CITY OF BOSTON,
OFFICE OF THE CORPORATION COUNSEL,
Nov. 6, 1891.

To the School Committee of Boston: —

Gentlemen, — I am requested by you to give my opinion upon the following question: —

Is the School Board empowered to admit young men to the Normal School, or must this authority come through the City Council?

Schools other than those required by law must be established by the town or city, and in considering the question it is necessary to ascertain for what purpose the present Normal School was established and has been maintained.

The Normal School seems to have been established by the city in 1852, by the following order of the City Council: "Ordered, That a Normal School be established in the Adams School-house (Mason street) as a part of the system of public schools, for the purposes set forth in the report of the School Committee, being City Document No. 32 for the present year." On referring to the report of the School Committee I find that the Normal School therein recommended was for girls only, as appears from the following quotation: "The pupils would be the daughters of our own citizens with their homes and affections here." The report of the Committee on Public Instruction which accompanied the order establishing the school contains the following language: "A Normal School, forming a part of our system of public instruction, would enable the active and energetic young women of Boston to qualify themselves to compete successfully for the places of teachers in our schools, and would thus secure the annual distribution of from \$60,000 to \$70,000 among the daughters of our own citizens." I cannot doubt that it was the intention of both the School Committee and the City Council of 1852 to establish a Normal School for women only. The school established by these votes was afterwards connected with the Girls' High School, and was separated from it by vote of the School Committee in 1873. Some doubts having arisen concerning its legality, these acts and orders of the City Council and School Committee were ratified and confirmed by the Legislature in Chapter 167 of the Acts of 1874, so that there can now be no doubt of the validity of the orders establishing the school. In my opinion the Normal School thus established is for women only, and young men cannot be admitted to it without authority being given by the City Council for the establishment of a Normal School for both sexes.

Respectfully submitted,

THOMAS M. BABSON,

Corporation Counsel.

The Committee on Normal School, to whom the subject had been referred, submitted a report to the Board, November 24, stating that "in the light of the facts collated, we are of the opinion that young men should not at present be permitted to enter our Normal School." This report was accepted by the Board, and the recommendation of the committee adopted.

The question of providing increased accommodations for the Normal School becomes more pressing. The proposition to connect the present buildings of the grammar and primary departments appears feasible and economical. This would give six or eight additional rooms and provide for the use of vacant rooms in the third story of the primary building on Appleton street.

LATIN AND HIGH SCHOOLS.

The city maintains ten public high schools, including the two Latin Schools.

The revised courses of study for these schools were adopted by the Board, and went into effect in September last. The subject of instruction in history in the high school received considerable attention of the Board of last year. A special committee was appointed in September, 1890, to consider the subject, and that committee submitted a report to the Board, in October of that year. The report was discussed, and finally referred to the Board of this year. A special committee was appointed, consisting of the members of the Committee on Text-Books and the Committee on High Schools to whom the subject was referred. This special committee reported in March, 1891, submitting the following orders:—

- 1. Ordered, That, beginning in September, 1891, the topical method, so called, be adopted as the method of teaching history in the Latin and High Schools.
- 2. Ordered, That the Board of Supervisors be directed to revise the Special Topics of the Course of Study in History, found in the appendix to School Document No. 29, 1877.
- 3. Ordered, That the revised "Special Topics," after having been approved by the Committee on Examinations and by the School Board, be issued as a School Document, to be used as the basis of the instruction in history in the Latin and High Schools.
- 4. Ordered, That the selection of reference-books in history be referred to the Committee on Text-Books.
- 5. Ordered, That the Committee on Supplies be authorized to expend the sum of five hundred dollars for the purchase of books of reference in history, after the same shall have been approved by the Board.

The report was adopted, and the orders passed. Subsequently the Committee on Text-Books submitted a list of reference-books in history to carry out the plan recommended in the above orders, and the books were adopted by the Board.

It is gratifying to the committee to record the fact that at last the new building for the Roxbury High School has been completed and occupied. The work of the school has been interfered with to a great extent by the lack of accommodations, and by the necessity of resorting to annoying expedients of placing classes in other school buildings and in hired rooms.

GRAMMAR SCHOOLS.

The number of grammar schools remains the same as for last year, namely, fifty-five. The average number of pupils belonging for the year ending June 30, 1891, was 31,181, and the average attendance was 28,418. The number of diploma graduates in June, 1891, was 2,413.

The revised course of study went into effect in September last.

In March of this year, the Board, on the recommendation of the Committee on Nominations, passed an order "that the Board of Supervisors be directed to present a report to the Board on the subject of promotions in and classification of the grammar and primary schools, with such recommendations as they may deem desirable." The Superintendent in his reports for the past two years has given some very valuable information in relation to the subject of pro-

motions. The subject of promotions and classification of schools needs investigation. If it be found that, all things considered, the present classification is the best that can be reasonably expected, it will be the means of settling some doubts. If, on the other hand, it be found that the present classification and system of promotions are not the best, it will enable the Board to make the needed changes to secure proper improvements. The time will be well and judiciously spent in either case.

A few years ago the subject of "recess or no recess" in the grammar and primary schools received considerable attention by the Board. Orders were passed authorizing certain schools to dispense with the morning recess, and shorten the morning session by dismissing the pupils at a quarter before twelve o'clock, M. There was no amendment of the regulations, and we believe the "no-recess" plan was not generally adopted. By the adoption of the revised courses of study the Board has determined that there shall be recesses in the grammar and primary schools. The morning session is to begin at nine o'clock and close at twelve o'clock, and there must be a recess "for withdrawals from the room, for the ventilation of the class-rooms, and for recreation. If for any reason the recess should be shortened or omitted, the time for the same must be given to physical training."

PRIMARY SCHOOLS.

The average number of pupils belonging to the primary schools for the year ending June, 1890, was

24,229, and the average attendance was 20,938. Two examinations of the first classes in the primary schools for promotion to the grammar schools have been held during the year, one in January and the other in June. The number of pupils promoted to the grammar schools in January was 421, and the number promoted in June was 5,415.

At the meeting of the School Board, held November 24, on the recommendation of the Board of Supervisors, indorsed by the Committee on Examinations, the following order was passed by the Board:—

Ordered. That the examinations of the first classes of the primary schools for promotion to the grammar schools be omitted next January; and that, under the direction and with the approval of the Committee on Examinations, the next mid-year promotions to the grammar schools, if any, be made by the supervisors of those schools, in consultation with the principals thereof.

For several years past we think the feeling has grown that the mid-year uniform written examination of the first classes of the primary schools for promotion to the grammar schools is unnecessary. There will, undoubtedly, be in some districts a few pupils who ought to be promoted from the primary schools to the grammar schools in February, but this can readily be accomplished by some less expensive and time-saving means than by continuing the uniform written examinations.

KINDERGARTENS.

There are at present 31 kindergartens, instructed by 56 teachers. The increase in the number of schools has not been so rapid as might be desired, but the appropriations have been such as would permit of a comparatively small number of new kindergartens. The success and popularity of these schools is undoubted, and the requests for their establishment continue unabated. It is the purpose and desire of the committee in charge to provide at least one kindergarten in every grammar-school district in the city.

EVENING SCHOOLS.

The city maintains one Evening High School, with two branches, one in Charlestown and the other in East Boston. There are sixteen Evening Elementary Schools. The whole number registered in all the evening schools during the term, October, 1890, to March, 1891, was 8,568; the average whole number belonging was 4,920, and the average attendance was 2,995. Since the adoption of the courses of study the standard of instruction in the evening schools has been greatly advanced. The attendance is much more regular than formerly, and the interest seems greater on the part of the pupils. Last March, at the close of the term, diplomas were awarded to the pupils in the evening elementary schools who had completed the course.

It is a well-known fact that a large number of the pupils leave the grammar schools before completing

the course of study. If these pupils might be induced to attend the evening schools, and the course of study so arranged that they might be enabled to go on with their grammar school studies, it would be a very desirable and great improvement.

In addition to the regular evening schools there are five evening drawing schools in this city. The instruction includes both free hand and mechanical drawing, and in the Charlestown school a course in ship-draughting is given.

The whole number of pupils registered the last term, in the evening drawing schools, was 946; the average whole number belonging was 562; and the average attendance was 483.

COURSES OF STUDY.

During the past year the revision of the courses of study has been completed. The revised primary school course went into effect in September, 1890. At the opening of the schools in September, 1891, the revised course for the Grammar, High, and Latin Schools went into effect. The course of study for the Normal School has recently been rearranged and can be found in detail in the catalogue for that school for 1891. (School Document, No. 5, 1891.) In the revision of the courses of study, two important matters have received special attention — moral training, and the study of Physiology. In the former courses there has been no special mention of or assignment of time to moral training. The general regulations of the public schools contains the fol-

lowing: "The morning exercises of all the schools shall begin with the reading in each class-room, by the teacher, of a portion of Scripture without note or comment." "Good morals being of the highest importance to the pupils, and essential to their progress in useful knowledge, instruction therein shall be given in all the schools. It shall be the duty of the instructors to secure good conduct and a proper deportment on the part of their pupils, both in school and out, and especially in going to and returning from school." In the revised course of study special provision is made for instruction in morals and manners and time assigned for such instruction.

The revised courses also recognize and provide for more definite work in Physiology with special reference to carrying out the law relating to the effects of alcoholic stimulants and narcotics. The directions relative to the instruction in this all-important branch of study in our schools are explicit. All the pupils are to receive such instruction. The Board has further provided for the fulfilment of the law relative to instruction concerning the effects of alcoholic stimulants and narcotics in the adoption of text-books prepared with special reference to such instruction.

Physical training and manual training have received special consideration, and are now included in the courses of study and time assigned with special directions concerning the instruction to be given. These special branches of study are mentioned because they are now placed in the courses of study in positions which their importance demands.

MANUAL TRAINING.

The revised courses of study for the primary and grammar schools provides for a definite time to be devoted to sewing, cooking, and other branches of manual training. The course of study prescribes that instruction shall be given in clay-modelling, paper-folding and cutting, sewing on cloth in colored threads and worsteds, stick-laying, and light cardboard constructive work. To facilitate this work the Board appointed, in February, 1891, Misses Caroline F. Cutler and Emily B. Stodder, special teachers of manual training. These ladies are to give lessons to the teachers of the primary schools in the departments mentioned above, and it is hoped that all the teachers of the primary schools will soon be able to give the instruction called for in the course of study.

In the grammar schools the course of study provides for a definite time to be devoted to manual training. The course in this branch is as follows:—

MANUAL TRAINING.

The relation of Manual Training to the study of Elementary Science is intimate and essential. Moreover, the relation of both to other departments of school-work — especially to language, geography, and drawing — is so close as to result in mutual helpfulness and in economy of time and effort.

The exercises in Manual Training are a means not only of physical and intellectual, but also of moral culture. They train to habits of accuracy, neatness, order, and thoroughness; they make a helpful occupation for otherwise unemployed time, or a relaxation from less pleasurable work; they present an incentive to good work in all directions; and offer at all times and in all connections a moral stimulus and preparation for usefulness at home and in the community.

Classes VI., V., IV.

2 hours a week.

SEWING, LIGHT TOOL-WORK, OR CLAY-MODELLING.

Note 1: All the girls in Classes VI., V., and IV. are to spend two hours a week in sewing. If, however, any girl shall have passed a satisfactory examination in sewing, she will be allowed to substitute for it some other branch of Manual Training.

Classes III., II.

2 hours a week.

COOKERY, CARPENTRY, OR CLAY-MODELLING.

Note 2: Every girl is to pursue a course of twenty lessons of two hours each in cookery, as a regular part of the work either of Class III. or of Class II. But a girl who shall have passed a satisfactory examination in cookery will be allowed to substitute for it some other branch of Manual Training.

Note 3: If the whole or a part of the time assigned to specified branches of Manual Training be not used therefor, such time may be given to any other of its authorized branches.

Class I.

2 hours a week.

Draughting and Cutting, Carpentry, or Clay-Modelling. See note 3.

The girls in the grammar schools have received instruction in sewing for many years. The regulations of the public schools provide that "instruction shall be given in sewing twice a week, for one hour at a time, to the fourth, fifth, and sixth classes of girls in the grammar schools; and such instruction may be extended into other classes by the Board, on the joint recommendation of the Committee on Sewing and the Division Committee of the school

where such extension is proposed." Under the provisions of the regulations, instruction in sewing has been extended to the upper classes in several of the girls' schools, and dress draughting and cutting has been taught in some of the first classes of girls' schools. Under the revised course, the work in sewing will probably be more definitely laid out, and a greater uniformity in method and purpose secured.

The introduction of the schools of cookery as a part of the public-school system dates from Sept. 1, 1888, when the city assumed charge of the school of cookery in the Tennyson-street school-house; Mrs. Hemenway, who had maintained the school for several years at her individual expense, making a gift to the city of all the fittings and paraphernalia. From that time to the present, as the limited appropriations which could be obtained for the purpose permitted, other schools of cookery have been established. There are at present seven of these schools in successful operation. The Committee on Manual Training Schools, in their last report (School Document No. 15, 1891), state that in order to properly instruct the girls in the grammar schools in cooking, it will be necessary to provide at an early day for additional schools of cookery. It is not considered wise or necessary to have rooms fitted in every girls' grammar school devoted to the purpose, but a sufficient number of cooking schools should be established, so that schools can be arranged in groups, and the girls not required to travel such long distances. It is suggested that fifteen of these

schools will be sufficient for the present. Eight schools of cookery have been established, and it is expected that the new school-houses now in process of erection will provide three more. It will be, therefore, necessary to ask for appropriations in 1892 sufficient for four more, the estimated cost of which will be about \$750 each.

It has been deemed advisable to appoint some one authorized to have the work of the schools of cookery under constant oversight, and to see that the standard work in each school is of the highest. The Board were so fortunate as to find in our corps of teachers one who was qualified for this position, and in September appointed Miss Amabel G. E. Hope, principal of cooking schools.

The Committee on Manual Training Schools recommend in their report that manual training in wood-working for boys be introduced into all the grammar schools as speedily as possible. It has been decided, after due and careful consideration, that it will be wiser to take one class at a time, and to begin with the second classes of the boys' schools throughout the city. This will require eight teachers and fourteen shops. There are five of these shops now in operation, and three more are included in the furnishing of the new buildings now being erected, which will leave but six more to be provided. It is estimated that the cost of furnishing each shop is about \$850. The six shops needed would therefore cost \$5,100. There are at present four instructors, and four more will be required. If the salaries of these new teachers were fixed at \$800 each per

annum, it would make a yearly increased expense of \$3,200. It would therefore be necessary to ask for an increased appropriation in 1892 of \$8,300 to successfully establish and operate the new shops.

It is not to be understood that because the boys are provided with instruction in wood-working now, that the girls are to be debarred from such instruction. The boys should be provided for first, but we trust that at no distant day instruction in wood-working will be given to the girls also.

During the year the City Council have appropriated one hundred thousand dollars for the Mechanic Arts High School. The land has been purchased, and the plans for the building are now being prepared, and it is hoped that before many months shall have passed the building will be ready for occupancy. A plan of a course of study for this school was presented in the report of the Superintendent of Schools in his report to the Committee on Manual Training Schools, contained in the report of that committee for 1889. (School Doc. 15, 1889.)

We look upon the progress in the department of manual training of the past year or two with great satisfaction. The experimental stages have been passed with profit and encouragement, and we have now begun the practical application of our knowledge and experience. The placing of this department as a regular branch in our school curriculum will require the closest attention the next few years to prevent mistakes, but we believe its ultimate success is almost assured, and that it will become one of the most beneficial branches of instruction in our schools.

PHYSICAL TRAINING.

The need of increased attention to the subject of the physical welfare of our school children has been so ably and repeatedly presented in the recent reports of the Board, and in other publications, as to need no extended notice here. It is also unnecessary for us to repeat the historical statements of the introduction and progress of physical training in our public schools. During the past few years the subject has received especial consideration. The reports of the special committees of the Board, of the Superintendent and Board of Supervisors, upon this matter, and the publications of the proceedings of the Physical Training Conferences held in our city under the auspices of Mrs. Hemenway, have been of inestimable value to us in our consideration of this important branch of our school work. It was clearly evident that something should be done, and the Board has taken up the matter with a determination to free our schools from any just criticism of neglect. In June, 1890, the Board ordered "that the Ling, or Swedish, System of Educational Gymnastics be introduced into all the public schools of this city." In November, 1890, the Board elected a Director of Physical Training, who entered upon the duties of his office Jan. 1, Thus were taken the first definite steps toward providing for some thorough, systematic instruction in physical training. Director, teachers, and pupils have taken up the work in an earnest manner, and we find everywhere a sincere desire to place physical training in its proper high position

in our schools. We look forward with interest to the report of the Director on the work of the past year, and his plans and suggestions for the future.

SCHOOL-HOUSES.

It has been the custom of the School Board not to ask for a new school-house until it was absolutely needed. The City Council were asked for an appropriation, and with the large demands made upon them for appropriations for all the different departments of the city, it was not unusual that a considerable time would elapse before the desired amount could be obtained. After the appropriations were made, the selection and purchase of sites, the preparation of plans, and the erection of the buildings were accompanied with delays; so that before one new building was placed in the hands of the School Board ready for occupancy, others were needed. As time passed, and the need of additional buildings was demonstrated, and the supply being slow and uncertain, it became apparent that the city was much in arrears relative to needed school buildings.

Early in 1889 the Board, by special inquiry, ascertained through the Committee on School-Houses, that a large number of new school-houses were imperatively needed. Selecting from a long list of the wants of different sections those which were most pressing, the Board asked the City Council to appropriate a sufficient sum for the purchase of sites for new buildings. The City Council, convinced of the necessity of immediate action and with a ready in-

terest, granted the appropriations asked for, and subsequently granted additional appropriations. The lots for nine new grammar and primary school-houses were purchased. This was the beginning of a determined effort on the part of the City Government and the School Board to provide for the children of our city the proper and needed accommodations which had been lacking for years.

Since the first effort in 1889, sites have been purchased for eighteen new grammar and primary school-houses, and for the new Mechanic Arts High School. The money has been appropriated for thirteen of the buildings, including the Mechanic Arts High School, and of these latter two or three are nearly completed.

In no small measure is this very satisfactory condition of things due to the City Council. By far the greater responsibility is theirs, and the liberal and generous policy they have assumed, and the ready and hearty interest they have manifested in regard to our public schools, deserve the united thanks of the people of our city. It is the hope and conviction of this Board that the City Council will not hesitate or allow any obstruction to prevent the completion of the buildings now needed, and that on the completion of these buildings a wise and judicious policy may be established of supplying each year at least one new grammar and one or two new primary school-houses.

MEDICAL INSPECTORS.

At the last meeting of the School Committee in June, 1891, the following communication from the Board of Health was received:—

HEALTH DEPARTMENT, 12 BEACON St., Boston, June 22, 1891.

To the Honorable School Committee: —

Gentlemen, — It has seemed to the Board of Health desirable that each school in Boston should have daily medical inspection, for the purpose of giving personal and timely advice for the suppression and prevention of disease among the pupils.

The Board of Health has an appropriation therefor, and desires to appoint fifty suitable physicians for the purpose of making this inspection, beginning with the reopening of the schools in September next.

Should this proposition meet the approval of the School Committee, its formal consent to the carrying out of the same is hereby respectfully solicited.

Early action is respectfully asked, as it is desired to arrange the full details of this scheme during the summer vacation.

Very respectfully,

THE BOARD OF HEALTH,

S. H. DURGIN,

Chairman.

This communication was referred to the Committee on Hygiene, with full powers. The Board had adjourned for the summer, and the Committee on Hygiene were of the opinion that the matter was of too much importance to be hastily acted upon, and they also had some doubts as to the power of the School Committee to act. They, therefore, were obliged to wait until the Board met in September,

when they submitted their report to the effect that, in their judgment, the School Committee had no power to approve the appointments of medical inspectors, or even the plan proposed by the Board of Health. The committee based their opinion on the opinions of the City Solicitor, which were submitted to the Board when the subject of the appointment of a medical inspector was proposed by the School Committee. The committee further expressed, in their report, other questions of expediency as to the proposed action. This report was accepted by the Board, and their recommendation that the School Board do not approve of the suggestions made by the Board of Health was adopted. Subsequently the action of the Board was reconsidered, and the report of the Committee on Hygiene was laid on the table and assigned for consideration at the next meeting. At the next regular meeting of the Board, held October 13, the subject was taken up, and Dr. Samuel H. Durgin, Chairman of the Board of Health, appeared before the School Committee and explained the proposed plan of the daily medical inspection of the schools. The subject was discussed, and a special committee of three members was appointed "to confer with the Board of Health as to the formulation of a plan to be followed by the medical inspectors who may be appointed, and also to obtain the opinion of the Corporation Counsel as to the power of the School Board in the premises." This special committee submitted their report to the School Board, Nov. 24, stating that they had conferred with the Board of Health, from whom they had received the following communication: —

Office of Board of Health, Boston, Nov. 10, 1891.

Dr. William A. Dunn, Chairman Special Committee:

DEAR SIR, — The plan for medical inspection of the schools is, in brief, substantially as follows: —

A sufficient number of physicians are to be selected to visit every school daily and examine such pupils as may be under any suspicion of being ill or of coming from families in which there may be illness of a contagious or infectious nature. Certificates for the return of children to school, after illness, are to be given by these medical officers as far as may be lawful and expedient. All questions pertaining to contagious or infectious diseases among pupils, or in the families of the pupils, and all questions pertaining to the general hygiene of the schools will receive such attention from these medical officers as may be given without interruption or disturbance in the school work. No authority is to be exercised by said officers.

For the Board of Health,

S. H. Durgin,

Chairman.

This communication was submitted to the Corporation Counsel by the special committee with the statement that "these medical inspectors are to be appointed and paid by the Board of Health," and requesting his opinion on the following points:—

- 1. Has the School Board authority to grant said permission?
- 2. If it has the authority, and the permission is granted, would the School Board be responsible for the acts of these medical inspectors?

The opinion of the Corporation Counsel was as follows: —

CITY OF BOSTON,
OFFICE OF CORPORATION COUNSEL, Nov. 23, 1891.

Messrs. Wm. A. Dunn, Russell D. Elliott, Thos. J. Emery: —

Gentlemen, — In reply to your communication of the 21st inst., in which you ask me two questions, I would say that the School Board has authority to grant permission to medical inspectors, appointed and paid by the Board of Health, to visit the school and school-houses under the charge of the Board. The School Committee or any of its members would not be responsible for the acts of these medical inspectors.

Yours very truly,

THOMAS M. BABSON,

Corporation Counsel.

The special committee closed their report with the recommendation that the following order ought to pass:—

Ordered, That the request of the Board of Health to appoint a number of medical inspectors of the schools be granted, the School Board assuming no responsibility.

This report was laid on the table and ordered to be printed.

Your committee have thus presented this general statement of the action of the Board on this subject, it being in their judgment one of the most important measures that have occupied the attention of the Board during the year. As the matter is now before the Board for consideration, this committee do not consider it within their province to express in this report their own views on the subject.

TRUANT SCHOOL.

Another year has passed, and the truant school still remains at Deer Island. In the judgment of this Board, Deer Island never has been, and never will be, the proper place for the detention of truants and absentees from school. June 14, 1886, an Act was approved (Chapter 282 of the Acts of 1886) requiring the city, upon the request of the School Committee, to "establish on the mainland, at some place removed from institutions occupied by criminal or vicious persons, a parental school for the confinement, discipline, and instruction of minor children convicted in the County of Suffolk, under sections ten and twelve of chapter forty-eight of the Public Statutes."

The School Board has each year sent one or two requests to the City Council to establish a parental school in accordance with the law above referred to. That such a school is needed is, we think, beyond question. The need of a parental school has been so frequently referred to in the reports of the Board that the facts are too well known to require any extended remarks in this report. We sincerely trust that the City Council of 1892 will find it possible to provide a parental school in accordance with the law.

It becomes the painful duty of your committee to record the death of two faithful and earnest public servants. Mr. Stillman B. Allen, late a member of the Board, died June 9, 1891. Though but for a brief term he was permitted to join our counsels and take

active part with us, he won our esteem and respect. His high character, his love for little children, and his deep interest in our public schools made his presence welcome in our Board, and his memory will ever be cherished in pleasant remembrance.

Mr. James F. Blackinton, late master of the Emerson School, died Jan. 7, 1891. During his long service of more than forty years in our public schools, — the last twenty-five years as master of the Emerson School, — Mr. Blackinton discharged the trusts of his office with diligence, good judgment, and fidelity. As a teacher he was respected and beloved for his manliness and sympathetic interest. As a friend he was highly esteemed for his dignity and courtesy. As a man he was sincerely honored for his sterling worth, his conscientious integrity, and his faithful Christian character. By his decease the city, the schools, and the cause of public education have lost a faithful and devoted servant.

ELIZABETH C. KELLER, JAMES A. McDONALD, CHOATE BURNHAM.

SCHOOL DOCUMENT NO. 20 - 1891.

REPORT

OF THE

COMMITTEE ON SCHOOL HOUSES ON A PARENTAL SCHOOL.

SPECIAL REPORT

OF THE

SUPERINTENDENT OF SCHOOLS ON REFORMATORIES.



BOSTON:
ROCKWELL AND CHURCHILL, CITY PRINTERS.
1891.

In School Committee, Boston, Dec. 8, 1891.

Ordered, That the Committee on School Houses be authorized to report in print on the subject of a parental school, and that one thousand copies of the report be printed.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

On April 14th of this year an order was passed by this Board instructing the Committee on School Houses to advertise for proposals for land suitable for a parental school. At the same meeting an order was passed instructing the Superintendent of Schools to visit such truant and parental schools and reformatory institutions of a similar class as might be necessary to obtain the information needed relative to building, organizing, and properly equipping a parental school in this city. In accordance with the first order, the Committee on School Houses obtained proposals for land, and out of about twenty, found four sites which seemed eligible and worthy of future consideration. One of these contained eight acres, and was offered, the whole or any part thereof, for \$800 per acre. The other three lots were smaller and somewhat more expensive. Superintendent Seaver has, in accordance with the instructions given, visited various institutions, chiefly in the West, and his valuable report and conclusions are hereto annexed. Some of the members of the committee have also visited several institutions in this vicinity, and one member has looked at the problem from the English standpoint. Some of this information may be helpful in considering our necessities here.

Great Britain has four grades of schools for juvenile offenders, and in number as follows:

| Reformatory So | chools | | | • | | 55 |
|----------------|--------|---|---|---|---|-----|
| Industrial | " | | • | | • | 150 |
| Day Industrial | " | • | | | | 18 |
| Truant " | 66 | | | | | 10 |

The former class are much like similar institutions in this country. The Industrial Schools are like our Lyman School at Westborough, where boys are committed who have taken their first steps in crime. The Day Industrial School is on the plan of sending the boys for the day only, and allowing them to return home at night. This plan is said to be a complete failure for any permanent results. The good that is done during the day by giving the boy work and surrounding him with helpful influences is neutralized at night by his return to a home of want and vice. But it is the latter class only, viz., the Truant Industrial Schools, in which we are especially interested. Let us look at them first as a whole, as the statistics will be valuable in proving some of the positions that have been taken by those who have given the most thought to it here at home.

There have been received into these ten Truant Schools from the beginning 11,130 boys. Deducting those who are still in school, we have 10,399 who have been licensed out and released. Of these there have been

| Licensed and not readmitted | | 6,198 |
|--------------------------------------|---|-------|
| Licensed and once readmitted | | 2,606 |
| Licensed and twice readmitted | | 1.017 |
| Licensed and three times readmitted. | | 391 |
| Licensed and four times readmitted. | • | 187 |

The average length of detention in all these schools for each boy has been 95 days. In other words, in about three months' time nearly 60 per cent. of the boys are permanently cured, and are never again arrested for truancy. In six months' time about 85 per cent. are permanently saved. In a period of nine months 95 per cent. are saved to society. Such a record is certainly worthy of commendation.

We visited the "Upton House Truant School" connected with the London School Board, which is supposed to be one of the best. It has a solid brick building, built in 1885, having accommodations for 140 boys from 6 to 14 years of age. They have an infirmary in a separate building, and the buildings cost about \$40,000. There are two or three acres of ground upon which the boys raise many of the vegetables needed for the table. The boys not only care for the garden, but do the housework, care for the laundry, etc. They are divided into two sections. One attends school from 9 to 12 in the morning, and does some form of manual work in the afternoon from 2 to 5, the other half of the class alternating with these. In the evening they all attend school. The record in this school is better than in many others; the average detention being but 80 days, and 70 per cent. are saved to society by this first confinement.

We desire to call especial attention to the expense for maintenance and management. It costs about one hundred dollars to keep a boy here for one year, but inasmuch as the length of detention is less than three months each, the expense per child is less than twenty-five dollars. Can we fully estimate what this means, a boy saved to society from a life of sin and shame and, possibly, crime, by such a trifle?

The plan adopted by the London School Board for dealing with truants is as follows: Boys are usually sent to the Upton House by the magistrates until they arrive at the age of sixteen years, but in some cases for short periods only, as six, eight, twelve, or sixteen weeks. The usual course is to license the child out at the expiration of about ten weeks, on condition that he attends a certified efficient school regularly. It then becomes the duty of the teacher of the school at which he attends to send a post card to the head office on every Friday afternoon, giving particulars of the boy's attendance. If they are perfectly satisfactory for a period of nine months, application is made to the Home Secretary that the boy may be discharged. If, however, the teacher's report shows that the

boy has not attended regularly, an officer is at once sent to visit the boy's home, and to warn the parents that if the boy does not attend with perfect regularity the license will be revoked. In many cases this warning is all that is needed. But should the boy continue to be irregular in his attendance, his license is revoked, and he is taken back to the Truant School. On this occasion the period of detention extends to about three months, after which the boy is again licensed out. If this license is revoked a second time, his next period of detention is still longer. In ordinary cases there is no necessity for the revocation of the license, but if, as occasionally happens, three or four revocations of the boy's license are ineffective, an application is made and proceedings are taken to have the boy sent to the ordinary Industrial School, or what we call a House of Reformation.

The subsequent attendance of the boys who have undergone the discipline of Upton House shows the efficacy of the system to cure truancy. The average attendance of the boys licensed out for the last ten years except the year 1884, when the school was being rebuilt, is as follows:

| 1879, | 88.80 | per | cent. | 1885, | 95.19 | per | cent |
|-------|-------|-----|-------|-------|-------|-----|------|
| 1880, | 84.07 | 6 6 | 66 | 1886, | 94.27 | 6 6 | 66 |
| 1881, | 91.73 | 66 | 66 | 1887, | 91.61 | 66 | 6.6 |
| 1882, | 90.97 | 66 | 66 | 1888, | 88.94 | 66 | 6 6 |
| 1883. | 90.96 | 66 | 66 | 1889, | 91.60 | 66 | 66 |

We submit herewith the "Time Table" of the Upton House School.

| A.M. | | |
|-------|--|-----------------------------|
| 6.00 | Boys rise, fold bedding, and wash. | Talking not allowed. |
| 7.00 | Clean house and school | Quiet conversation allowed. |
| 8.00 | Breakfast | Talking not allowed. |
| 8.40 | Prayers. | |
| 9.00 | Distribution for school and work; one division in school, remainder | |
| | industrial work | Necessary conversation. |
| М. | 70 111 | |
| 12.00 | Drill | Talking not allowed. |
| P.M. | 70 10 | |
| 12.50 | Prepare for dinner | Quiet conversation allowed. |
| 1.00 | Boys' dinner | Talking not allowed. |
| 1.30 | Recreation. | |
| 2.00 | Distribution for school and work . | Necessary conversation. |
| 5.00 | Drill | Talking not allowed. |
| 5.30 | Prepare for supper | Quiet conversation allowed. |
| 6.00 | Supper | Talking not allowed. |
| 6.30 | Industrial work | Necessary conversation. |
| 7.30 | Prayers. | |
| 8.00 | Boys to bed | Talking not allowed. |
| | | 1 |

We have given somewhat minute details up to this point, not only because they show the correctness of the position which the advocates of the Truant or Parental School have always taken, but because this committee were asked by the Committee of the City Council to submit some definite plan embodying our views, and these facts seem to form a basis for the plan which we would now beg leave to submit:

- (1.) To purchase in one of the outlying wards, where it can be purchased at a small cost, several acres of land, a part of which at least shall be suitable for cultivation. Boys are to be sent here to work and not to play. Labor upon the land will not only be healthful for them, but they can contribute thereby something towards their support.
- (2.) A substantial but very plain brick building, which may be called the Central Administration Building, to contain the offices and rooms of the Superintendent and of the assistant, if one should be needed, and also to contain the

kitchen, laundry, etc. We think this building and its appointments should be large enough for a school of 200 boys. There are about 100 at the Truant School at Deer Island now, and there are others who ought to be sent somewhere away from home if a proper place is provided.

- (3.) A brick building for school-rooms, and a shop for wood-working, etc. We believe it would be wise to have four school-rooms of the usual grammar size, 32×28 . This gives a chance for some classification, and in the evening, if we have classes for study, all the rooms would be needed. One room would be sufficient for the Manual Training Shop. There should be a small hall in this building to provide for general exercises when needed on the Sabbath, and at other times.
- (4.) There should be several cottages provided for dormitories for the boys. We are most earnest in the belief that the "cottage plan," so called, is the wisest method for all schools and reformatories of this kind. It gives an opportunity to classify the older and the younger, and to separate also those who are most obstinate from those who are better disposed. Those who have seen the plan as it is worked out at the Lyman State School, at Westborough, in various places in the West, or in the orphan homes at Glasgow, and in other similar institutions in both countries, know the advantage of this system over the great barrack plan of massing a hundred or more in one building. These cottages, we think, could be of wood, grouped around the central building, and should have accommodations for about thirty in each. There should be provision in each cottage for a housekeeper and a teacher. Four of these cottages would probably be enough at first, and two or three others could be added as needed.

There has been a question whether or not it was wise to have the boys all eat in a common dining-room, or whether each cottage should have its own, the food being all cooked in one kitchen and carried by the boys to the different buildings. There are great advantages in the latter plan. The separation gives a teacher an opportunity to instruct far better than when all are brought together. The habit of waiting quietly one's turn, and in general of being unselfish, can be better explained and illustrated with the few than the many. Such a plan would add somewhat to the expense. and if for reasons of economy it should be found necessary to have one dining-room in the central building, we do not see why a part of the advantage mentioned above cannot be attained, by having this large room divided into four or fiveparts, with large connecting doors. This would give an opportunity for separation, a continued classification, and an opportunity for closer personal instruction. After consultation with the City Architect we believe all these buildings. including the cost of the land, could be furnished for a sumnot exceeding \$125,000.

Two general remarks upon this plan should be made: First, everything about the building and the furnishing should be the simplest and plainest possible. The place should not be made in any way so attractive that boys will want to come here. It is stated that many wretched people contrive to commit some petty crime in the fall of the year sothat they may be sent to some of our penal institutions and be eared for comfortably through the winter at the city's expense. They are too lazy to work, and they have no shame, This Truant School must not be made a paradise for boys. They are sent here because they are beginning to go astray. with the hope of saving them. The school life must be felt to be a penalty and not a reward. All the work about the building and grounds they should be compelled to do. It should be hard, uneeasing work of body and mind, and up to the limit of their strength from the minute they enter. They should be made to look to the coming with dread, and to the discharge with pleasure. They should carry such a report back to their regular schools as to deter other boys from

going astray, and thereby being sent here. This is the greatest benefit of the Truant Schools in London. The Superintendent advised us that the fact that there were these schools where boys could be sent immediately has probably reduced by three-quarters the truancy in the city. They serve as a preventive of evil, which is the great point to be aimed at always.

The second point that we would insist upon is, that there should be neither fences, nor bars, nor bolts. Experience has shown that this is the best way to prevent such boys from running away. They are to be saved by being trusted to this extent.

It seems almost unnecessary to repeat the argument which has been used again and again for the establishment of such a school. We want such a school to save boys who are commencing to go wrong, and to make of them self-respecting citizens. We want this in place of the present system, which, as will be seen later, does not accomplish the purpose, and never can.

The necessity for such a school as supplementary to our present system will be more apparent, if we examine a little in detail as to what Boston is doing in educating its children. Under the compulsory education laws of this State, we mean to provide accommodations for all children, and we have an efficient truant force throughout the city to look after and bring into the schools all neglected children. This is all very different from the condition of things in many, we think we may say in most, of the large cities of the country, where there are insufficient school accommodations, and where thousands of children are in consequence left to run in the streets. The truant service, we believe, in most of these cities, is also far less efficient. The fact is, Boston is doing more to gather in and save the children from the lowest classes in society than any other city. She not only opens the school doors wide to every race, and creed, and color, but she uses the most vigorous measures to compel them to come in. The last school census shows, May, 1891:

In other words, about ninety per cent. are in the schools. Of the remaining ten per cent. nearly three-quarters are under school age, as the above statistics include all children over five years of age, while the law does not require them to attend school until they are eight. We have accounted, practically, for all but about one thousand eight hundred, or two and a half per cent., and most of the latter are found to be invalids. We believe none of our large American cities can show such a record.

With this effort to educate all classes and conditions, we often have in a single room six or eight nationalities. Many children are born in homes of vice and often of crime. They hate all restraint and obedience to law, but by controlling them in love, and yet with a firm hand, they are for the most part brought into complete obedience. They are brought up to a higher plane, are touched by the noblest motives, and feel the inspiration which comes from contact with earnest men and women, and are fitted for citizenship.

But there are among these tens of thousands of children a few exceptions, and it is for these exceptions that we must provide. To illustrate by two cases that have come to my knowledge within a week: The first is of a boy who is absolutely rebellious in every school where he is placed. He stubbornly refuses to render any obedience, or to respect in any way the rights of others. He is to-day wandering about the streets, idle and indifferent. He is not yet a criminal,

but left to himself he soon will become one. The second is of a boy who has a good home, and as yet shows no vicious tendencies, but who has a weak will, and is easily influenced He is continually absent from school, but is so good a boy in other respects that the officer hesitates to send such a boy to Deer Island. It is for such boys as these that we need a parental school. They want to be taken away from their present surroundings, put under restraint with firmness, and yet in love, and saved before they enter upon a career of crime and shame. In the constitution of the Boston Farm School we find it was organized for "idle and morally exposed" boys, and not for a reformatory. These words and their object express admirably our thought in this parental school. If we are to continue in the future as in the past to take all classes into our schools, we need this school properly to supplement the others. Our judges hesitate now to send such boys as I have described to the present Truant School on Deer Island. They know very well that the character of a boy is forever smirched by being sent there. The island is the abode of criminals, and sending a boy to such a place is to destroy his self-respect, and make him utterly indifferent and hopeless about the future. judges are aware of this, and so when a boy is arrested he is often put upon probation at home, as there is no proper place to which he can be sent. He is thus left exposed to the old temptations, he goes from bad to worse, until finally he does commit some crime and is a fit subject then for a reformatory. While we have been practically "playing" with the law, the boy is getting beyond the period when he can be most certainly saved.

We need such a school, not only to save the boys themselves, but as an act of justice and safety to other children from purer and better homes who have not gone astray. These should be saved as far as possible from contamination. Furthermorè, this separation not only marks the clear distinction between that which is good and that which is evil, but it helps to confirm the one class in the right, while it is rescuing the other that is going astray.

Again, it is just to the teachers that these bad boys who are the storm-centres of evil in the school-room shall be put under restraint. Every teacher will testify that the dealing with these few rebellious boys costs them more mental strain and exhaustion than all their teaching. Often they cannot do their best work for those who want to advance, because of this anxiety over these special cases. Ought either the teacher or the faithful scholar thus to suffer?

What has already been stated above leads us to consider, perhaps, the chief difference we have at the present time with others who are interested in the solution of this question. The Statutes of 1886 clearly state that the parental school shall be established not only on the mainland. but at some place removed from institutions occupied by criminals or other vicious persons. The effort was made before the last Legislature to strike out this part of the act, the object being as stated, to remove the boys in the Reform School at the Island as well as the truants away from the institution where older criminals are confined. The reason given for this proposed legislation was that there was no difference between the boys in the Truant School and those in the Reform School; and, therefore, they could both be cared for in one institution with separate buildings. With this last proposition or statement we must most respectfully differ. We want an institution for an entirely different class of boys from those who are in the Reform School. What we ask for is a Parental School to care for the truant and the rebellious before they have committed what is commonly called crime. The boy who persists in going to a ball game instead of school is not yet a criminal, but he will be. The boy who defies authority at home and school, and whose parents would gladly have him put where he may be compelled to be

obedient, is not yet a criminal, but he will be. It is a wise thing to straighten a young tree that has become bent, even if it requires some effort and restraint for a time; it is a better thing to put a guard around a sapling that seems especially weak, and thereby prevent it from becoming crooked. It is a good thing if a child has set its own clothing on fire to smother that fire speedily; it is a better thing to take the matches away before the mischief is done, even if the child objects to having its play interfered with. We want what was contemplated by those who framed the law, who are living to-day, and know just what they wanted: a parental school to prevent crime, not a reform school to cure crime. And we submit that for such totally different purposes the institutions should be separated. It is no answer to this to say, that if one goes to Deer Island and enters first the Reform School and then the Truant School, he will see very little difference in the boys. We grant this; but we repeat again that we have never had such a school as we require, and that for the want of it our judges have refused to send boys at first to the Island. They have had too large hearts for that; they know the peril of the surroundings; they have hesitated, hoping the boy might see the evil tendency of his course; and not until he has gone farther and farther astray have they finally consented to the sentence. After all this delay it is often true that the boys in the two schools are much alike. We want a school so that there need be no delay, and where evil tendencies can be checked before they have become fixed.

If our friends, instead of spending their time trying to amend this law, which is correct as it is, would help to the solution of another problem, we should be truly grateful. In very many cases of truancy and rebellious conduct, the parents are more to blame than the boy. Sometimes the fault is with the father, whose capidity makes him desirous of getting the boy to work, and who upholds him there-

fore in his truancy. Sometimes it is a weak mother, who is deceived by a bad son, and upholds him in his defiant spirit. If we could sometimes arrest the parents, the boy would be all right. In Germany, a short time ago, out of 5,000,000 children, but about 5,000 were absent without cause, or one in a thousand. In Berlin but fourteen boys and one girl evaded the law. The government, in order to secure school attendance, arrested 1,088 parents for trying to evade the law, and fined 1,020. It is almost as serious a matter to try to escape sending a child to school as to evade paying taxes. In France, the name of every truant is posted in the mayor's office of the arrondissement in which he lives. If the child does not appear at school at once the parent is fined twentyfive francs, and in case of a repetition of the offence the parent is imprisoned. There are of course great difficulties in attempting to frame any law that would reach the case, but we feel we ought at least to call attention to its necessitv.

Two objections have been made to the proposed parental school. First, that there may be serious conflict of authority between the Directors for Public Institutions and the School Sect. 3 of chapter 282 of the Acts of 1886 Committee. reads as follows: "Said (parental) school shall be under the general charge of the Directors for Public Institutions of said city. The School Department of said school shall be subject to the visitation and inspection of the School Committee of Boston, and the studies and examinations therein shall be under the supervision and regulation of said School Committee and Directors for Public Institutions jointly. Every teacher employed in said school shall hold a certificate of his qualification from said School Committee." intent of this law is certainly very clear, that the institution shall be under the control of the Directors for Public Institutions, the School Committee having a joint right to decide in the matter of studies and examinations, the teacher

always to have the certificate required in our regular school. It is very evident that inasmuch as the scholars are expected to be in this institution but a brief period, and then return to their former schools, the course of study needed would be exactly the same as that they have been following and that they are to resume when discharged. The teachers should be those of the highest order, who by experience have showed their special fitness for this class of pupils. With such a plan we are sure any board of directors would be in hearty accord. The details of general management must remain where the law has placed them. Certainly the School Board have no desire to increase their responsibilities. It is very difficult now to get proper men and women to discharge the present trust; we cannot conceive it possible that any member would ever wish the burden increased. The building of this school ought not to be delayed for fear of future difficulties, which probably will never arise, and which, if they ever do arise, can doubtless be readily removed.

The second difficulty is that of the expense. We ought certainly fairly to consider this question, and no member of this Board will intentionally favor any expenditure which is not imperative. There are too many other needed things as yet unprovided to allow us to be careless at this point. parental school, such as we have described, with a separate corps of officials, will certainly cost more than at the present time, and more than if it were united with some other institution. But we believe this increased expense can be easily over-estimated. There will be a few more salaries to pay than now, but the expense for food, etc., will be no different. We must not forget that on the plan proposed most of the work is to be done by the boys themselves, and their own labor in the garden, and possibly elsewhere, may be made to contribute largely to their support. This is found to be true in other places, and we see no reason why it should not be true with us here. But even if the expense should be

much greater than we think it possibly can be, yet we believe the maintenance of such a school would be a wise use of the public funds.

The present institution at Deer Island, we believe, is accomplishing comparatively little to prevent truancy or to cure the truant, and when we say this we would not be understood as criticising in any way the present officials. We are dealing not with a question of individuals, but of a system, and we believe the present system fails largely of its purpose. Boys are sentenced here for six months, a year, or sometimes for two years. They are many of them, for the reasons given above, already criminals when they are sent here, and the institution accommodates but about one hundred. Boys are sent here for a little time, and pardoned out to make room for others, and before any cure of any kind can have been effected. Officers are frequently told when they arrest a boy, by his parents, that it is all folly, that they will have the boy back again in a few days; and they do. Case after case can be cited where boys are sentenced for six months, and then pardoned within thirty days. We saw a boy, on a recent visit, not yet twelve years of age, who is serving his fourth sentence. The boys care nothing about this sort of brief punishment; many of them declare that they enjoy going down the harbor to the Island to stay for a few weeks. It makes a pleasant break in their lives. In all frankness we ask, Is an institution conducted on this plan accomplishing what it should for the city? On the London plan, three-quarters of the truancy is prevented because of the dread the boys have of being sent to the Truant School. There is little of such dread here. On the London plan, seventy per cent. of the boys are cured in three months, and never are truants again. About the 1st of December, of sixty-nine inmates of the House of Reformation twenty-four were formerly members of the Truant School, and all of them were under fifteen years of age. On the London plan, the criminal tendencies are nipped in the bud, and the boys grow up to be useful to the State. On our plan, the boys are necessarily permanently injured by the label "been to the Island"—a label which can never be removed; their self-respect is usually gone, and there is nothing upon which to build character. Instead of preventing crime, we are too often helping to produce crime by familiarizing the boys with it, by a few weeks' residence on an island which is solely used as the abiding place of criminals. With these facts before us shall we stop long to consider a little increase in expense? Without considering the higher motive of saving the boys, and putting the question only on a money basis, we would say: The most expensive thing for the State is crime; the best way to prevent it is the highest economy.

In the light of the above facts, we feel that in a new truant school especial emphasis should be laid upon one of the points made in Superintendent Seaver's report, viz.: "Release from school should always be earned by good conduct, industry, and learning, on the part of the boys; never by influence acting from the outside."

We believe that one reason why more cannot be accomplished for permanent good with the boys committed to the Truant School is the lack of some system of manual training. Referring to the report of Nov. 27, 1883, we find the following: "The committee also recommend that an Industrial School, properly fitted, be added to the new Truant School, so as to enable the children to receive, in addition to their mental training, some practical knowledge, which will prove of lasting service to them, and prepare them to better pursue some useful and honest occupation after leaving the institution." The recommendation was passed unanimously.

We believe it is almost impossible to overestimate the value of manual training in its disciplinary effect upon boys of the kind under consideration. This matter has been so recently considered, in School Document No. 15 of this year,

that only a brief reference need be made to it in this report. Every school and every reformatory where it has been tried are unanimous in its endorsement. The "street-boy class," out of which the truant comes usually, has low moral perceptions, and thinks he must get on in the world by getting something out of another weaker than himself. But give these boys tools and let them work for themselves, creating out of rough wood something useful that did not exist before, and it is a new revelation to them. It is theirs by creation, and not only do they expect other boys to respect their property now, but they are led to respect that of others. While their mental faculties are being quickened, their brains being reached through their hands, they are also learning what is more important still — lessons in honesty and truth. They have learned not only the real meaning of "mine," but of "thine" as well. We are persuaded that no truant school can do its best work without an efficient, wellequipped manual-training department.

We desire to repeat again, that there may be no misunderstanding, that we are not criticising any officials, many of whom we know are superior, but the *system* under which they are working. It was the best known years ago, but with the modern study and thought of so many of our ablest men and women, better methods have been devised; and Boston has never been content to live in the past.

In this report thus far nothing has been said about any provision being made for truant girls. While there are comparatively few of these cases, there is imperative need for an institution which will care for those that we do have. Formerly this class of girls were sent to the Island the same as the boys; but as such a plan was so objectionable, it has been discontinued. Private institutions can often be found to care for these girls, but they cannot be regularly sentenced to confinement in them, and there ought to be some proper place provided whereby they can be legally committed.

Many of these private institutions take the best care possible of these girls, but as they are not regularly sentenced, they are often removed in a short time by relatives, before any cure has been effected, when they return to their former perilous haunts, but not to school if they can avoid it. It is unnecessary to dwell upon what inevitably follows, when a girl begins to be a truant in a great city like this with pit-falls everywhere. It means a life of shame and disgrace and sin.

It ought to appeal to us all the more when we remember that many of these girls are truants on account of their surroundings. Let us illustrate by a case which has occurred within a few days.

A mother, with an only daughter thirteen years of age, is dependent upon her own constant labor for their joint support. The woman is obliged to go to her work at 6 o'clock in the morning, and does not return until 8 o'clock in the evening, and even Sunday is no exception to the rule. The child is thrown upon her own resources, being left all her waking hours without protecting guidance, save what she finds in the public schools. Is it strange that she becomes a truant, and thus avoids all restraint? And still, she behaves well while in her class. Should not the city come to her rescue and provide the home which it is impossible for the parent to afford, and thus save her and similar unfortunates from temptation and probable ruin? The example of older girls truanting repeatedly without any adequate punishment is very pernicious to younger children, and, consequently, the number of offenders is increased. The effect of one girl's arrest is wonderful in bringing those inclined to truancy into school, and we are confident that only a small number, comparatively, would need to be sent away were a proper school established. Such a school should, of course, not be in close proximity to that for the boys, and we do not think it would be necessary to provide for more than twenty or twenty-five.

The fact that there was such a school would prevent much of the truancy. If the city should buy some place in the suburban wards, with an acre or two of land, and a house upon it which could be enlarged so as to provide for the above number of girls, also for a matron, a teacher, and a domestic, it would suffice, for the present at least, and it could be run at a comparatively small expense.

We are sure if the furnishing of this school could be put to a popular vote, every tax-payer would gladly record his wish for a proper home for these girls, so that crime and pauperism might be prevented, and that those who have fallen into bad habits because of their evil surroundings might be redeemed and saved. We think a proper place could be provided for about \$25,000. The Committee append an order asking for an appropriation of \$150,000 to cover the estimated expense of both schools.

It is now over eight years since the first order was introduced asking for a new parental school. The membership of the School Board has changed again and again, and yet with all these changes, without a single exception, every person who has ever sat in the Board has felt that the Deer Island Truant School should be removed. Such unanimity in such diversity of minds is significant.

After this report was written, to satisfy ourselves that our investigations and conclusions were correct, the committee sent a circular letter to all the masters of our Grammar Schools asking:

- (1.) What proportion of the boys sent there had been permanently cured by their first confinement?
- (2.) What, in their judgment, had been the influence of the Deer Island Truant School to prevent truancy?

Of course in some districts there are seldom, if ever, any cases of truancy, and many masters have never had any boys sent from their schools to the Island. But from those who have had experience, the vast majority have seen little

value in the school to prevent truancy in others, and only four believe that it has had any material influence in curing it in those sent. We submit a few extracts from these letters from some of the best masters in our city, who have been practically studying the problem for years:

- (a.) "Approximately ten per cent. of the truants are cured by the first confinement."
- (b.) "Two boys have been sent to the Island during the past five years. Both were pardoned out in a few months. One of these has been sent away for larceny, and the other is in another reformatory."
- (c.) "I have not heard of a single case of truancy permanently cured by confinement there."
- (d.) "Only one pupil has been sent from this school during the past five years. He had a bad record when he came to us from another school. He was finally sent to the Island, where he stayed about *one* week. I wondered at the brevity of his sentence, but found 'influence' had been brought to bear to pardon him out."
- (e.) "I do not recall a case where commitment to the Island has wrought a cure. If these boys could have been placed under good influence and a firm but mild rule before vagrant habits had become almost chronic, I think they might have been saved."
- (f.) "I have never known a boy to be permanently cured of truancy by being sent to Deer Island. The returned truant has always been dreaded because his influence has been such as to increase rather than to diminish truancy in others. Boys sent to Deer Island seem to me to consider themselves hardened criminals, and when they return their friends of similar tendencies rather enjoy their companionship, and look up to them as possessed of unusual courage and fortitude. The faithful, efficient, and judicious truant-officer for the past twenty-four years in this district says he has known but two boys to be permanently cured of truancy by confinement at Deer Island during all these years."

- (g.) "In twenty-seven years I have known but two cases which showed marked reformation in truants by being sent to the Island. I should say that not more than one per cent. are cured of truancy by confinement the first time sent."
- (h.) "In my judgment the influence of the Truant School at Deer Island has been bad bad continually. Truancy has greatly increased in this district the past five years. I have never known a boy to be permanently cured of truancy by a term at Deer Island."
- (i.) "In my judgment the Truant School at Deer Island has had no influence either to cure or to prevent truancy. During the last thirty years there may have been sent somewhere about twenty boys to Deer Island from this school. I never knew of but one boy cured of truancy by being sent there."
- (i.) "In answer to Circular No. 86, I feel myself obliged to say that I do not consider the Truant School at Deer Island a success. It does not seem to me that the boys sent there are in any great measure improved. I cannot say whether this state of things is due to the treatment they there receive, or to the nature of the boys themselves; I only know that most of the boys who return from the Truant School to us again become truants in a very few days, or weeks at the best. Fear of the Truant School no doubt keeps a large number of boys in school, as it acts on both boy and parent. This preventive action constitutes the chief value of the school. I should not think the number of cures brought about by a single confinement to be greater than twenty-five per cent. In my opinion the truant is not taken in hand early enough. He is, in most cases, allowed to become a confirmed truant before the law is brought to bear upon him. In my experience, most truants are confirmed in their bad ways before they enter the Grammar School; and then, being in many cases of weak will-power

they cannot be reformed by the distant fear of the 'Island.' Very little progress in the treatment of truants will be made until we are able to put our hands upon the child at the first offence, and to keep them upon him until he is saved."

(k.) "There is a custom of releasing truants on parole when friends request it before the expiration of their sentence, which is almost uniformly bad. The boy feels that he has, by his friends, beaten teachers, truant-officers, and courts (and can do it again if necessary), and therefore is often more daring and defiant than before. He is very unwilling to come to school again, and if he does come, he is apt to feel that a court sentence is only a sort of round-trip ticket to Deer Island, and so he is very apt to be more troublesome than before."

This report would not be complete without referring briefly to the delay which has taken place in the providing of this school.

Nov. 27, 1883, the Committee on Truant Officers made a report from which we make the following extract: "The stigma of having been to Deer Island, associated as it must be with the idea of crime, should be entirely and forever removed from the thoughtless truant, the unaccountable absentee, and the helpless, neglected child. Your committee are so thoroughly satisfied of the imperative demand for a change in this regard, that they have appended an order asking the City Council to provide accommodations in some other locality than Deer Island, and where it is hoped the baneful influence of vice and crime may be removed as far as is possible from the children committed to the Truant School." This report was signed by Albert Palmer, John B. Moran, Russell D. Elliott, Thomas F. Doherty, and Timothy J. Dacey, and the order appended to the report asking for the transfer of the school was passed unanimously. No action having been taken by the City Council, the School Board in March, 1884, made a second request to remove

the Truant School from Deer Island. In September, 1884, a third request was sent, and in December of the same year a fourth request. In January, 1885, the Board of Directors of Public Institutions made a report to the City Council, in which occurs the following paragraph: "The Board are of the opinion that if a proper place could be secured, it would be advantageous to the truants to be removed from the influence which naturally prevails among the class of people sentenced to Deer Island, even though they are kept entirely separate, as is the case at present." Thus there seemed to be perfect accord between the Directors for Public Institutions and the School Board. As there were some legal difficulties, it was thought best to apply to the Legislature for an Act to enable the city of Boston to do the thing which was universally desired; but for some reason the legislation was not granted that year. In January, 1886, however, the School Board renewed its application to the Legislature, and in June, 1886, the law was passed, the first section of which says: "The city of Boston shall forthwith, upon being requested thereto by the School Committee of said city, establish on the mainland, at some place removed from institutions occupied by criminal or vicious persons, a parental school for the confinement, discipline, and instruction of minor children convicted in the County of Suffolk, under sections ten and twelve of chapter forty-eight of the Public Statutes." On the 14th of September, 1886, at the very first session after the summer recess, the School Board passed an order asking the City Council to provide such a school for truants in accordance with said law. Similar requests have been sent to the City Council from time to time: but after more than five years' delay, and although the law is very positive in its terms, no provision has as yet been made by the City Council to comply with it. The last two requests were made in January, 1890, and in January, 1891.

In December, 1890, the City Council passed an ordinance, as follows:

AN ORDINANCE RELATING TO THE ESTABLISHMENT OF A TRUANT SCHOOL AT DEER ISLAND, AND COMMITMENTS THERETO.

Be it ordained by the City Council of Boston, as follows:

SECTION 1. The institution, premises, or situation, known as the Truant School at Deer Island is hereby provided, established, and assigned as the suitable place for the confinement, discipline, and instruction of children convicted of any offence described in the following sections of this ordinance.

SECT. 2. Any habitual truant, and any child between seven and fifteen years of age, found wandering about in the streets or public places of the city of Boston, having no lawful occupation or business, not attending school, and growing up in ignorance, shall, upon conviction thereof, be committed to the Truant School at Deer Island, described in the preceding section.

SECT. 3. The Truant School at Deer Island shall be under the care and control of the Board of Commissioners of Public Institutions.

Sect. 4. Section 2 of chapter 34 of the Revised Ordinances of 1890 is hereby repealed.

Furthermore, almost every possible effort has been made before each succeeding Legislature to have this law amended in some way to deprive it of its original intent. The Committee on Legislative Matters, the Superintendent of Schools, and others have been compelled again and again to appear before committees at the State-House to prevent changes in the law which would deprive it of its value. We feel that the time has fully come, in the interests of humanity and justice, for the City Council to carry out the provisions of this act. The school should have been provided in 1887 or 1888. The regular school accommodations, on account of the neglects of the past, had become so inadequate that in 1889, 1890, and 1891 it seemed to be the first duty of this Board to press for new school buildings. We have felt that the good boys should be provided for first, and that if any-

thing must wait, it should be the proper provisions for the truants and absentees. These requests have been most generously granted by the City Councils of the past three years, and more than \$1,400,000 has been granted for school-house sites and buildings, including the Roxbury High and Mechanic Arts High Schools. In this final report of this committee for this year, it seems fitting to place on record our appreciation of this fact.

The building of the remaining Primary and Grammar Schools asked for last year will bring us up to a normal condition where the usual annual expenditure will be all sufficient.

The City Council having appropriated the money for a Mechanic Arts High School, will, we are sure, provide us the means to carry out our whole plan of manual training, the most comprehensive of any city in this country. With sewing, cooking, wood-working, our girls and boys will enter life with various avenues of industrial work all open to They have learned that labor is honorable, and that idleness is to be despised. We believe the schools are being administered so that they are a credit to our city. In all appointments more and more stress is being laid upon character and fitness. All considerations of a political nature have been eliminated, and the thought that they are the common schools of every race and creed is kept ever in mind. We need now these parental schools as a supplement to all the rest to save the tempted and to protect the innocent. To such calls of humanity Boston always responds.

For the Committee,

SAMUEL B. CAPEN, Chairman.

Ordered, That the City Council be requested to appropriate the sum of one hundred and fifty thousand dollars for land and buildings for parental schools, in accordance with the plans above suggested.



REPORT ON REFORMATORIES.

To the Committee on School Houses:

In obedience to your instructions, I visited in May and June last some of the best reformatories in the country, for the purpose of obtaining information that might be useful in planning and managing a school for truants in the city of Boston. This report contains first some account of my visits and observations, and secondly a statement of points considered essential to the best plan and the best management of a school for truant children.

Brief mention, however, may here be made of the fact that reformatories were not the only institutions I visited; for, taking advantage of good opportunities coming in or near my way, I sought to extend my personal acquaintance with schools in which manual training has become a feature. So I visited the High School at Indianapolis, the Rose Polytechnic Institute at Terre Haute, and the Technical School at Cincinnati; also revisited the manual training schools in Chicago and in Cleveland which have been described in a former report. But, as manual training is not directly in the line of the present report, no more will be said here about these schools. Elsewhere and otherwise my knowledge of them may be utilized.

THE NATIONAL CONFERENCE OF CHARITIES AND CORRECTIONS.

My departure from Boston was so timed that I might be in Indianapolis during the sessions of the Eighteenth National Conference of Charities and Correction, May 13-20, 1891. There I expected to make the acquaintance of superintendents or trustees whose reformatories I might wish to visit later. Moreover, some of the papers announced, together with the discussions likely to arise thereupon, promised to be interesting and helpful to one desiring to be placed in the current of the best recent thought concerning the treatment of juvenile delinquents. In neither of these expectations was I disappointed. I made the acquaintance of persons whose friendly aid has since proved invaluable; and I heard presented before the Conference something of the purposes sought to be realized by the more progressive among the managers of reformatory institutions; something of the evils growing out of older but now discredited methods of management; and something of the better results obtained by the more rational modern methods. So attendance at the Conference may have afforded a good preparation, for my work that was to follow. However this may have been, certain it is that the meetings were full of interest, not alone for professional people, but for all who cherish any active regard for the well-being and safety of human society.

THE REFORM SCHOOL FOR BOYS AT PLAINFIELD, INDIANA.

Many of the delegates to the National Conference visited this institution, which is situated fourteen miles to the west of Indianapolis, and enjoys a high reputation for good management and efficiency in its proper work. The proper work of a reform school is the reformation, not the punishment, of its inmates. Constant emphasis needs to be laid on this distinction, because the general habit is to ignore it. Reform schools are not boys' prisons; though sometimes, from mistaken theories of management, they have become practically the same thing. The school at Plainfield is as far as possible from being a boys' prison. It resembles rather a great boarding school, kept under close supervision certainly, but without

bolts and bars, without prison cells or dormitories, and without high walls and fences around the yards and grounds. The visitor is impressed at once by the absence of all these things. He sees a dozen cottages where the boys dwell in families of fifty. These partly surround a pleasant, shady park, near the entrance to which stands the administration building, while the dining-hall and gymnasium just inside at the right, and the chapel on the farther side, complete a circle of buildings. Outside this circle are scattered workshops, storehouses, and barns; the hospital, the boiler-house, and various other structures - a separate building for each separate purpose - no huge pile designed to serve many purposes at once. Among these scattered buildings, and over the whole farm of two hundred or more acres, the boys come and go quite freely. There is little to prevent their running away if they are so disposed. They do run away sometimes; but far less frequently than they would under prison-like restraint. On the day of my visit the whole school, nearly six hundred boys in all, were scattered about in different fields playing games, chiefly base-ball. There was nothing to prevent a squad of them from making a break for liberty, if they had chosen. They would not have been pursued, but allowed to run. Notice of the escape would have been sent to the sheriff of the county, who probably would bring the boys back in due time. The only provision against escape that appeared was a light wire guard upon the dormitory windows in the cottages; but this certainly would offer but a slight obstacle to boys bent on escape. Here, as elsewhere, experience has taught that boys do not much wish to run away when they know they are quite free to do so. So it is coming to be the fashion to build reformatories without high walls; and the high walls surrounding some of the older ones have been pulled down.

The reform school at Plainfield receives boys from the whole State of Indiana. Commitments are made by the Cir-

cuit and the Criminal courts (courts of record), "after a fair trial in open court." No boy can be committed during the vacation of a court.

The limits of age within which commitments may be made are, for crime, from eight to sixteen, and for incorrigibility, from ten to seventeen; but the Governor of the State may commute the sentences of older boys, who have been sent to prison, and transfer them to this school during minority. All commitments run to the age of twenty-one, and no boy is absolutely discharged until he reaches that age. The managers of the school stand in loco parentis all that time. Boys who, by a long course of good conduct and industry, prove their trustworthiness receive tickets-of-leave, which entitle them to live with their parents again or with employers who agree to care for them and give them good homes. These tickets-of-leave, under a vigilant supervision which compels an immediate return to the school for unsatisfactory performance either on the boy's part or on that of his employer, and which also permits return in case of sickness or other misfortune to the boy, have been the means of restoring many boys to decent and orderly ways of living. On this point a recent report says: "Thirty-five hundred boys have at various times been under the discipline and instruction of the school. Of these nearly three thousand have won their 'honor,' and have gone out to all parts of the country on tickets-of-leave. That the work of the school has been well done the subsequent lives of these boys have borne testimony. Some have fallen, but eighty-five per cent have made good citizens." This may seem an over-sanguine estimate of the reforming power of the school; but any one who should visit the institution and make himself acquainted with the principles upon which it is managed, would be inclined to believe all that is claimed.

The chiefly important feature of the organization is the division of the boys into groups or families; each family

occupying a separate house and living there under the care of a "house-father" and matron after the manner of children at home with father and mother. So far as practicable under the circumstances the elements of home life are preserved in these houses. It is not a perfect home life, to be sure; yet for many of the boys it is a far better home life than they ever knew before they came here.

This plan of organization, known as the cottage plan or the family plan, is widely different from the congregate plan still adhered to by many of the older reformatories, but falling into discredit in the light of modern experience. The only feature of the congregate plan remaining at Plainfield is the practice of assembling the whole school three times a day in the great dining-hall for meals. There are reformatories where the meals are served in the cottages, although the cooking is all done in one large kitchen. This practice is believed to be better, because it enlarges the scope of the family life by multiplying opportunities for the exercise of a parental influence on the boys. This influence can be exercised at no place better than at table, if the family be not too large. Fifty, the number at Plainfield, seems too large. Thirty would be large enough. But "think of the expense," says the economist. Certainly the expense is great; the reformation of boys is expensive work anyway; but it is vastly more expensive to let them go unreformed. The very best means of reformation, even if costly, are the most economical in the end. Probably the least expensive plan of organization is the old congregate plan; but experts in such matters have seriously questioned whether that plan does not propagate more crime than it prevents.

Next in importance to organization comes the employment of the boys' time. They are at their books half of each day and at work the other half, the school being divided into two parts, working and studying alternately. There are no vacations, save that the older boys, in the busy season, work all day when continuous work is necessary for the thorough learning of their trades. The schools are graded very much as city public schools are graded, on the basis of proficiency in studies. But the greatest importance attaches to the "grading by moral condition," which can be carried out with much discrimination in assigning boys to the different cottages. Among the twelve families there exists a well-marked precedence; and promotion from one to another is used as an effectual means to encourage improvement.

The boys are taught trades to a considerable extent; but the scope of this instruction appears to be limited, for the most part, to the need the institution may have for the product of the boys' work. Particularly is this true of the housework. The cooking, bread-making, tailoring, shoemaking, shoe-mending, and laundry work have to do merely with the boys' own food and clothing. The same remark applies to the gardening and farming, though this work has a more direct relation to the boys' probable future occupations. But the brickmaking, bricklaying, plastering, carpentering, plumbing, and steam-fitting have more the aspect of distinct trades to be learned here in the school and followed in after life. Many competent workmen the school has sent forth, as we may easily believe, judging from the impressive evidences of their proficiency still to be seen here. All the cottages in which the boys now live were built by their predecessors. The bricks were made and burned by boys, who used for the purpose the top soil of a neighboring field. A brick barn eighty feet long was built with only eleven days of hired labor; the rest being done by the boys. The boiler-house was built in the same way; and when it came to setting the boilers and fitting the steam-pipes, the contractor was told to send merely a foreman to show the boys how to do the work, and they

did it all. Plumbing has been taught in the same way, as occasion offered. At the time of my visit some of the boys had just finished a brick wall by the side of the main driveway. This work had been given them for practice in bricklaying, before they were set to work on the walls of a new laundry house which was then in progress.

Instruction in the trades, particularly in those connected with building, appears to be very thoroughly given here; gardening, too, seems to receive a good degree of attention; but it is surprising to find comparatively little done at farming. In the midst of an agricultural population, with plenty of good land easily obtainable and with big boys enough for help, farming would seem to be the very first occupation to receive attention. Yet so far is this from being the case, that sixteen cows and a few horses are all the live-stock found in the barn; most of the milk is bought of farmers in the neighborhood; and the supply of potatoes and vegetables comes largely from the same source. There is a possible reason for this apparent neglect of agriculture, which did not occur to me at the time, but which was suggested by what I learned of the experience of other institutions later. It seems to be the fact that boys who come into a reformatory from the city are pretty sure, sooner or later after their release, to return to the city again. It has been found wellnigh impossible to wean city boys from city life. Their interest in farming and gardening is seldom strong enough to hold them in the country when placed there. Even in the best homes that can be found for them in the country, they feel lonesome, grow uneasy, crave more companions and excitement, and so run away - back to the city, or even back to the institution which placed them out. Now, as most of the inmates of reformatories come from cities, and are pretty sure to return thither, it would seem that the best preparation for their probable future courses in life would be afforded by instruction in mechanical trades rather than in gardening or in farming. If this be so, the teaching of trades in reformatories would seem to be altogether worthy of the greater attention it has of late been receiving.

The personal history of the boys shows that most of them are here for felony, a few for incorrigibility, but none for truancy. "Truancy and absenteeism from day schools" are mentioned as evil ways by falling into which boys get here; but the action on a complaint of truancy such as is used here in Massachusetts appears to be unknown to the laws of Indiana. Among the measures now urged upon public attention for the prevention of crime is "a good compulsory law, requiring all children to attend school." It would seem, then, either that there is no compulsory law at present in Indiana, or that the existing law is a dead letter. In either case we should not expect to find truants in the reformatory, and in fact do not.

Why, then, it may be asked, take the trouble to study this Indiana reformatory, if it is designed not for truants, but for young felons? What light can its experience be expected to throw on the matter of planning a "Parental School" for the care of truants in Boston? Chiefly this, that bolts and bars and unscalable walls may be left out of our plans altogether; provided we at the same time abandon congregate living and prison-like restraint and discipline, choosing rather to rely upon the more wholesome and the more effectual influences of family life. If this has been done not only with safety but with conspicuous success in the case of six hundred young criminals, how much surer of success must we feel in applying similar treatment to one or two hundred young truants, who are not criminals? Self-control is the chief thing to be taught in a reformatory. Was selfcontrol ever learned from prison discipline?

But Indiana is not the only State in which experience points to this conclusion. Wisconsin and Michigan offer

examples of juvenile reformatories well managed on the family system, and without prison-like restraint. Of these something will be said farther on. Other States might be added to this list upon information though not upon my personal observation. But we need not go out of Massachusetts for a most impressive record of experience, amounting indeed to a conclusive demonstration, proving that prisonlike restraint and prison discipline have no rightful place in a juvenile reformatory. Whoever is familiar with the history of the State Reform School at Westboro' has seen that institution by turns a boys' prison under good management, a boys' prison under bad management, a prison for one part of the boys and a group of families dwelling on open premises for the other part, and latterly a boys' industrial school from the management of which all traits of prison discipline have vanished. In this its latest form it appears to be best fulfilling the purpose of its original foundation, -the reformation, not the punishment, of boys.

But, it may be said, the general condition of this institution and the effects of its discipline upon the boys at different periods may not have been due altogether to the system of management; much more may have depended on the character of the man in control. Undoubtedly this is so; and we should always be on our guard against attributing too much to the system and too little to the man. an illustration, I may here record the final incident of my visit to Plainfield. It happened that I must wait quite a long while for the return train; so I improved my time by making the acquaintance of some of the people in the neighborhood. I chanced to talk with a very intelligent mana farmer — who said he had lived thereabout and known the Reform School well for twenty-two years. The present excellent condition of the institution, he asserted, was due to the man at the head more than to anything else. He had known the same institution with a different man at the head

to be "in a horrible condition." He felt sure that more boys were cured of their vicious propensities by kind treatment, such as they now received, than by harsh treatment; and he went on to illustrate his remark by reference to a fine colt his son had just brought in from its training. I assured him I was fully prepared, by what I had seen during the day, to accept his favorable opinion of the present management of the Reform School at Plainfield.

There is in Indianapolis a public institution named

THE INDIANA REFORM SCHOOL FOR GIRLS AND WOMEN'S PRISON,

the management of which I heard praised in high terms. The work both of the reform school and of the prison is reformatory in all its details, the aim being to administer the penal code, as required by the State Constitution, "on principles of reformation and not of vindictive justice." The institution is governed and managed exclusively by women; and indeed owes its existence to the activity of two women, agents of the Society of Friends, who took up the work of reforming the treatment of female prisoners some twenty years ago. From personal observation of this institution I can say nothing; but there is a passage in the last annual report to which I wish to draw attention, because it is a good piece of evidence to prove that, if a reformatory and a prison be joined together under one management and in one house, great precautions are necessary to guard against the evil consequences of corrupt associations.

The report says:

"While dwelling on the management in general of two entirely separate departments of the women's prison and the reform school, it is proper to state that the only time the inmates meet in common is at the chapel services Sunday afternoon. Even then, the boundary line is clearly drawn, as the prisoners occupy the back rows of benches and are the last of the congregation to come and the first to leave."

Separation being so very important, there should be, wherever possible, wholly disconnected premises and independent management for different classes of delinquents. This is the principle which modern thought and practice have established. We are proceeding upon this principle when we require that truants shall be separated from criminals here in Boston.

A visit to the County Jail at Indianapolis was made, but nothing was observed which needs to be recorded here. It is enough to say that the unfavorable impressions there received served to illustrate by way of contrast the points of good management elsewhere observed.

THE CINCINNATI HOUSE OF REFUGE.

This is one of the oldest reformatories in the country. It was opened in 1850, and has cared for 6,375 children since that time. The number in the Refuge at the end of last year was, boys 242, girls 73, total 315; which is not far from the average number for several years past. Some idea of the character of the children committed may be formed by noting the fact that, taking last year's commitments as a guide, about one quarter are sent here for crimes (petit larceny, burglary, and assault); another quarter as having unsuitable homes or no home at all; and the remaining half for incorrigibility, loitering, drunkenness, vagrancy, and truancy. The Board of Directors describe the children in this language:

"The children sent to our care consist of a few petty criminals or unfortunate girls, a few convicted of nominal offences common to youth, and many who, from the misfortunes of poverty, vice, and intemperance on the part of parents, are in danger of growing up to lead vicious and immoral lives."

The children are noticeably young. Nearly one quarter of them were ten years or younger at commitment; and one of the schools in the institution is a kindergarten with children four, five, and six years of age. The average age at commitment is just a little over twelve years. The absence of any considerable number of older inmates is explained by the great extent to which placing out in private homes is carried on. There are "out on leave" in private homes under the watchful supervision of special officers of the Refuge, on the average, eight hundred children - a number which is annually augmented on the one hand by about two hundred new cases, and diminished on the other hand by about the same number of final releases. It appears therefore that the chief business of the Refuge with the children detained here for the time being, is to prepare them in the best manner for living in private homes. The average time now taken for this purpose is scarcely more than a year, but the care of the institution over its wards extends to the age of twenty-one.

Considering the age and character of the children, the causes of commitment, and the purpose of their detention, the visitor is surprised to observe the prison-like aspect of the buildings, placed, as for the most part they are, within the secure enclosure of a stone wall twenty feet high. these buildings were designed many years ago, when, as we may believe, the true principles of reformatory administration were not as well understood as now. If new buildings on a new site were to be designed, there doubtless would be cottages in which family life could be carried on with the utmost completeness practicable. For the managers of this institution have already recognized the importance of family living and of the close gradation of inmates by moral condition thereby rendered possible, and have provided for such living as far as practicable within the buildings now occupied. The three hundred inmates are separated into six divisions or families, four of boys and two of girls. Each family has a separate school-room, workshop, dormitory, dining-room, recreation-room, and playground. Thus the congregate plan of former times has been as far as practicable abandoned.

This division into families makes possible different treatment of different grades. Inmates are received into a middle grade. Those who behave well and do their work well are promoted to the "honor grade," where they enjoy more privileges, have better food and clothing and pleasanter quarters. Those who are ill behaved and neglect their work are placed in a lower grade, and kept there until they earn a promotion back to the middle grade. In the lower grade they are cut off from privileges, have plainer fare and garb, and live in the least pleasant quarters.

With skill and good judgment in the application of this system of rewards and punishments the results, it is said, are wonderfully good. I had no opportunity to verify this statement in the present case; but after making myself familiar with the results of the same system as applied to young men at Elmira, I can readily believe that equally good results may be obtained with boys, and much more easily. This method of discipline is believed to engender a manly self-control and self-respect, — the foundation qualities of all reformation,— and, wisely managed, it will not breed an undue amount of hypocrisy or priggishness. But even these undesirable qualities are preferable to the servility and sullenness produced by the discipline of brute force.

Perhaps the most noteworthy thing in the management of the Cincinnati House of Refuge is the recent introduction of manual training. Boys no longer do contract labor for outside parties, the institution reaping the benefit; but the institution now gives thorough instruction in various trades wholly for the boys' benefit. The teacher has supplanted the boss; and the boy, not the thing he labors on, is the chief object of care.

There are already in successful operation classes for instruction in printing, carpentry, wood-turning, wood-carving, wood-engraving, tinsmithing, shoemaking, and tailoring. The leading purpose in all these shops is the thorough instruction of the boys in a useful trade. It is proposed soon to add classes in bricklaying, blacksmithing, and painting. All this has been done and proposed to be done after the example set by the State Industrial School at Rochester, N.Y., concerning which a committee of the Cincinnati directors say:

"Your committee appointed to visit similar institutions East have during the year performed that mission with much interest and satisfaction to themselves, and we hope in practical application of improved methods for our own school. We are pleased to report that in no institution save one, that of Rochester, N.Y., did we find anything to excel the progress made in the Cincinnati House of Refuge. The House at Rochester is a model of its kind, complete in almost every department of the trade industries, and has been in successful operation many years."

Next in the report is recorded the fact that Captain Levi S. Fulton, for many years the Superintendent at Rochester, has lately come to Cincinnati to take charge of the House of Refuge. So we may expect to see repeated at Cincinnati the success which trade instruction has achieved at Rochester. One obstacle in the way at the House of Refuge should be noted,—the shortness of the time the boys are kept in the House before they are placed out. They cannot thoroughly learn trades in a year, the average time of detention before parole now. A committee of the directors say:

"We are inclined to think that if they were retained in the institution for a longer period and until they had acquired a full course of instruction they would be benefited still more. We suggest this for your very careful consideration." Here it may be said that my coming to Cincinnati was more for the purpose of seeing Captain Fulton and learning about the Rochester institution than of visiting the House of Refuge. It was Captain Fulton who first directed my attention to the comparative uselessness of attempting to teach agriculture and horticulture to city-bred boys. This opinion is held also by the directors at Cincinnati. On the question of moving the House of Refuge out into the open country they say against the measure:

"It should be borne in mind that our wards are nearly all city children, with their habits and customs, differing from those in State institutions of like character, who come largely from rural districts, and as it is almost impossible to make of city children farmers and gardeners, farm lands of extended area would, for our use, be of little benefit. In a contracted space trades can be taught, for which the child of the town seems to possess natural aptitude."

Experience at Rochester, it is said, supports the same conclusion. And this conclusion is easily enough accepted, when we think on the environment of city children, especially of the class that mostly supplies reformatories with inmates. But there is something relative to this matter to be noted in the experience of the next institution visited.

THE ILLINOIS SCHOOL OF AGRICULTURE AND MANUAL TRAINING FOR BOYS AT GLENWOOD.

This is not a public institution but a private charitable corporation, into the management of which modern ideas have been admitted under favorable circumstances. It is a true "parental school," organized under a general statute of the State of Illinois, and authorized to receive from the courts boys who come within the following description: "Every boy who frequents any street, alley, or other place for the purpose of begging or receiving alms; every boy who shall

have no permanent place of abode, proper parental care or guardianship; every boy who shall not have sufficient means of subsistence, or who from other cause shall be a wanderer through streets and alleys or other public places; and every boy who shall live with, or frequent the company of, or consort with reputed thieves or other vicious persons." Such boys are declared "dependent boys," and are committed by the courts to the care and custody of schools like the school at Glenwood.

The county is authorized by law to contract with the school for the maintenance of the boys at established rates. From these rates and from the gifts of charitable people comes the pecuniary support of the school. The chief gift in the foundation of the school is the splendid farm of three hundred acres of improved land with excellent buildings, all valued at \$60,000. The farm house and other buildings continue to be used exclusively for farm purposes. A competent farmer and his wife with the necessary adult help carry on the farm, employing the boys as much as practicable in all kinds of work suitable for them. buildings are an administration building containing the superintendent's rooms and offices, together with a kitchen, laundry, bakery, sewing-room, storerooms, and a large dining-hall for all the boys; a school-house of four rooms; a building for workshops and military drill; and six cottages, where the boys live in families of thirty each.

These cottages are built of brick two stories high, at a cost of about five thousand dollars each. On the first floor are the reception-room, the housekeeper's rooms, the boys' sitting-room, a bath-room (two tubs and twelve bowls), and a wardrobe. Upstairs are a teacher's room and six boys' bedrooms, each with five beds. There is a large play-room in the basement. Each family is under the care of a teacher and a housekeeper, both women. As the school grows, more

cottages will be added. A chapel also is needed, and a hospital.

The boys are subjected to no physical restraint whatever, being free to come and go as they please in obedience to general rules. There is no provision against running away, not even wire guards over the sleeping-room windows. In age the boys range all the way from three to seventeen years. Many of them are habitual truants; many are neglected children; but none of them are so far criminals as to be considered by the courts fit subjects for the State Reformatory. The children in our Marcella-street Home, together with two or three score of our habitual truants, would pretty fairly represent the class of boys committed to the school at Glenwood.

The legal control of the Glenwood school over its boys extends to the age of twenty-one. As fast as the boys can be prepared for private home life, they are placed out. But as the homes for them are found chiefly in the country among farmers, the necessary preparation consists in weaning them from city street life by stimulating in them a liking for the occupations and incidents of country life. The boys live long enough at the school to become quite familiar with farm and garden work and to acquire some fondness for it. Such a preparation increases the probability of their remaining contentedly in their country homes. Whether the boys are permanently weaned from city life in most cases, is a question the experience of this school is not yet long enough to settle; but present indications favor an affirmative answer. Certainly the boys prepared by this school for country living are much better contented than are boys taken directly from the city to the farms without preparation.

Besides the farming and the gardening are the shoemaking, the tailoring, and the housework usual in institutions of this kind, for the boys to become proficient in. A beginning has been made in manual training, but the scope of the instruc-

tion is quite limited. Nothing beyond a little wood-working is attempted. The teaching of mechanical trades is altogether unprovided for. Thus the only occupations for which the boys are trained to the point of fitting them to earn a living after leaving the school are those of agriculture and horticulture. Possibly, in the future development of the school, training for the mechanical industries may receive more attention.

The present condition of the school is admirable. The boys are bright, clean, and healthy. They are unusually happy and contented in appearance. The rooms they occupy are all kept scrupulously neat and clean. No "institution odor" anywhere. Indeed the whole establishment is a model of order, good taste, and neatness quite pleasant to see. I have called the school a "parental school" in view of its legal relation to the boys under its care; but there is another and much stronger reason for so naming it and that is found in the character of the present superintendent, Mrs. Ursula L. Harrison. A generous, strong, motherly nature, a keen insight into character, and a large fund of common sense qualify her for this work remarkably well. She has a great reputation for success in the management and discipline of boys. She never strikes, never drives, always leads. Her power of discipline she believes to be wholly a natural gift; she fails to analyze it in her own mind or to communicate it to others desiring to learn of her. But undoubtedly this ability to exert a strong motherly influence over nearly two hundred boys is the one thing that explains the outward manifestations of success the visitor meets in this school. It is one more illustration of the fact that success comes more from the person who administers a system than from the system itself.

There is an industrial school at Feehanville, near Chicago, designed for the same classes of children that are received at Glenwood. It is managed by people of the Roman Catholic

faith. My plan for visiting this school was relinquished by force of circumstances; and so my knowledge of it is limited to what could be learned in conversation with one of the trustees, Thomas Brenan, Esq., of Chicago.

This school as well as the one at Glenwood receives a great many boys who are in fact habitual truants, and who would, here in Boston, be complained of as such. Nevertheless neither school serves, or can serve, as a truant school for the city of Chicago. Nor has Chicago any place for the detention of truants except the common jail. Active inquiry is now going on, however, as to the best means of supplying this great deficiency. Compulsory education is beset with insuperable difficulties when the mildest sentence for the convicted truant is confinement in the common jail.

THE WISCONSIN INDUSTRIAL SCHOOL FOR BOYS AT WAUKESHA.

This is a reformatory which has been conducted on the family plan with open premises for more than twenty years. Originally the organization was on the old-fashioned congregate plan. Fortunately, the first building, which was of wood, was burned down in 1868; and thus an opportunity was given for building cottages and reorganizing the whole institution on the family plan. The great improvement wrought by this change has attracted attention throughout the country, for it was one of the earlier experiments of its kind in America. There are no high walls or fences, no bolts and bars, no extraordinary watchfulness to prevent escapes. The boys come and go freely among the buildings and over the three hundred acre farm. Sometimes they run away; but they do so less frequently than they did in the days of congregate living and prison-like discipline.

The class of boys committed here may be learned from the nature of the complaints against them and from their ages. Of 319 boys committed in one year, 132 were guilty of larceny, 96 of incorrigibility, 48 of vagrancy, 28 of burglary, 6 of forgery, 6 of assault, 2 of arson, and 1 of receiving stolen goods. Their ages at commitment ranged from nine to eighteen years, the greater number being fourteen and fifteen. The average age of all was fourteen years. They are committed during minority, but are allowed to go out on parole subject to recall for unbecoming conduct. The average period of detention is about three years. Most of the inmates have had, before commitment, little or no schooling.

Their "biographies" recorded at the office are interesting reading. One little fellow of ten years was committed for "stealing one dollar and fifty cents"—not a large amount; but the manner of the stealing was more remarkable. He provided himself with a pistol, and invited four or five other little boys to go with him into the fields to play. On reaching a secluded spot the little rascal threatened to shoot his companions if they did not throw up their hands; which they did, while he went through their pockets in the most approved style of the highwayman. Dime novels, of course. Another boy, sent here at ten and discharged at twelve years of age, stole a horse from an Indian in the Green Bay country and rode away into the woods. He was more mischievous than criminal.

Such are the boys. They come mostly from the country; Milwaukee, the only large city in the State, sending about one quarter of the whole number.

The boys' time is divided between books and work. The larger boys are employed chiefly on the farm and in the garden. The smaller boys, to the extent of nearly half the whole number of inmates, are employed at knitting-machines making socks. As many boys as are needed are employed in the kitchen, bakery, laundry, and at other domestic service. There are also a tailor's shop and a shoe shop for making and mending the boys' clothing and shoes. A few shoes

and large quantities of socks are made for the market. Formerly the manufacture of boots and shoes for sale was an important part of the industry of the institution; but this has been abandoned as unprofitable. Unskilled labor, even though costing nothing but its board in the institution, could not compete with skilled labor and machinery outside.

Little appears to have been attempted, as yet, in teaching the boys mechanical trades. Perhaps this should not be expected where the population is so largely rural as that of Wisconsin now is. Probably the farming and the gardening, which the boys now learn quite thoroughly, lead more directly to self-support, in most cases, than would mechanical trades. Still, the need of the latter is beginning to make itself felt. The State Board of Supervision, in a recent report, says:

"It is quite probable that the industries carried on at the institution can be, and ought to be, increased in number; but such increase should be only with the purpose of more thoroughly realizing the idea of industrial training."

The teaching of trades to be thorough will probably require longer detention in the school than is now usual; but this may not be altogether a disadvantage, seeing that the paroled boys are now under insufficient supervision outside, the State not having provided officers enough for this purpose.

There remain two features of this school which merit full description; one is the family life in the cottages, and the other is the strict marking system forming the basis of all grading, promotion, honors, privileges, and paroles.

The family life in the cottages is as complete as it can be made. The boys not only sleep in the cottages and spend all their leisure time in and about them, but they also take their meals in the cottage dining-rooms. The cooking is done in a central kitchen, from which the food is transferred hot to the cottage tables. The advantages of this plan over

that of congregate dining are believed to be very great. Manners, which are minor morals, can thus receive the attention their importance requires. The family life reënforced by its completeness becomes more effectual in its good influence over its members. The assembling three times daily at table is an element of family life which cannot be omitted without serious loss. If, therefore, the use of separate dining-rooms for each family be attended by extra trouble and expense, as doubtless is the case, there is ample compensation to be found in the increased efficiency of the family discipline.

The cottages are substantially alike. They are of brick, three stories high, and would cost to build, in Boston, say eight thousand dollars each. The first story, which is really a basement with its floor on the level of the ground, contains a large living-room centrally placed, with a storeroom in the left wing, and a washroom and bathing-tank in the right wing. In the large room is placed a hot-air furnace for heating the whole house. Here also, ranged around the room, are wooden chests used both for seats and for storing the boys' playthings. In the washroom each boy uses a jet of water which falls to the floor - no basins, no chance of infection, individual towels. The tank is ample for bathing, but not for swimming. The second story contains the dining-room (central), the housekeeper's room (left), the pantry and the hospital (right). Two beds in the hospital room. The third story contains the dormitory for forty boys (central), officer's room (left), and clothes-room (right). The beds are placed one above another on two-storied bedsteads. The dormitory with its furnishing constitutes, perhaps, the least commendable feature of the cottages. The arrangement at Glenwood with five boys in a room seems better. There is a separate playground attached to each cottage, on the farther side of which is a shed for sanitary uses. Each cottage is placed in charge of one man (a teacher) and one woman (housekeeper). The cottages and the administration building stand in a long row fronting on a pleasant park; the shops, kitchen, laundry, and other buildings form a parallel row in the rear; while the barns and farm buildings are placed still farther back. The whole aspect of the place is highly agreeable, and as far as possible from suggesting the idea of a boys' prison.

The discipline relies chiefly on encouraging boys to shorten their periods of detention at the school by working for promotion to the "honor grades," and through them to parole and release. This is virtually an application of the principle of the indeterminate sentence. A careful record is kept of each boy's scholarship, workmanship, industry, and deportment, by each officer under whom he comes. The summary of a month's marks thus kept gives a boy his grade, which is expressed by a number on a scale ranging from 0 to 9. On this scale a boy may be advanced or degraded one or two points at a time. When he has reached and held "grade 9," he may be promoted to the "honor grades," which are indicated by the symbols H1, H², H³, and so on as high as he chooses to go. Usually when a boy has reached H10 (honor ten) he is a good candidate for parole. Some such system of recording degrees of excellence in performance of work and in deportment should be adopted in every reform school; and this record should be the only basis for the granting of releases; the releasing power receiving recommendations for release, not from persons outside, but from the head of the school. There must be no interference of a releasing power actuated by influences from outside, if the boys are to retain the belief that the best way to earn parole and release lies through faithful work and good conduct. By holding this belief the boys come to look upon the officers as their best friends and allies in their efforts to win an honest title to freedom; but if this belief be destroyed, the basis of wholesome discipline is gone. Nothing then remains but confinement and coercion until a day of unearned deliverance.

THE WISCONSIN INDUSTRIAL SCHOOL FOR GIRLS AND YOUNG BOYS AT MILWAUKEE.

This institution is well organized, housed, and managed. Founded originally as a private charity, it has received large endowments from the city of Milwaukee and the State of Wisconsin, while the State exercises the power of visitation. It receives girls under sixteen and boys under ten years of age, for care and protection, not for punitive treatment. The neglected and morally exposed children are brought here, and their commitment is looked upon as a civil rather than a criminal process. The declared criminal is not here.

A full report of my very interesting visit will not be attempted here, since it would be somewhat beside the present purpose; but there were two things worth noting. The first is the great care given to the separation of the inmates into groups, or families, according to moral condition, age, and experience. The second is the effort to preserve for all inmates the essentials of family living. The new dormitory is an illustration of this. It is thought desirable that each girl, as she grows towards womanhood, should be allowed a room by herself - some one place she may call her own and cherish as a sort of home — where she may retire occasionally for relief from the constant pressure of companionship and publicity. So the new dormitory has been arranged to give each girl a little room, six feet by nine, with a window at one end and a door at the other opening upon a long corridor. This plan has been found decidedly better than that of a large open hall with many beds.

THE MICHIGAN STATE REFORM SCHOOL FOR BOYS AT LANSING.

On my way from Milwaukee to Detroit I stopped at Lansing, expecting to visit the reformatory there; but the superintendent was away, and admission to the institution was denied because there were cases of scarlet fever in progress. I could only walk about the grounds, view the very handsome buildings, and verify the information already received to the effect that this institution is managed on the family plan with open premises. The high walls which formerly surrounded the yards and grounds have all been torn down, and no trace of them remains. tages are the finest I saw anywhere, judged by the exterior. The cost, estimating by our Boston standards, would be something like ten thousand dollars each. Only for the presence of the central building, suggesting an institution, the visitor might take these cottages to be private residences occupying the borders of a well-kept park.

From documents received since the foregoing was in type it is gathered that the superintendent, Mr. C. A. Gower, is of the opinion that the main reliance in the work of reformation must be placed upon the influences and discipline of the family life which is carried on in the cottages. In particular, Mr. Gower is opposed to the system of "grades and honors" as practised in many reformatories. His remarks on this point are well worth reading. The following are quoted from an address made before members of the Michigan Legislature:

"Another method (or perhaps we should call it lack of method), which prevails with us, and in no other institution in the United States, is the entire absence of anything in the nature of grades, honors, badges, or other device intended to

stimulate the boy to good conduct through rewards. The system of grades, formerly in vogue in our institution, was abandoned for several reasons, but especially because it seemed to us so entirely at variance with the influences to right-doing which would greet the boy on leaving school, and for which we should fit him. The boy who, while in the school has been tempted to right-doing by such moral appetizers as badges and honors, would find himself upon leaving us, without any further motives to correct action. Very many people do not believe in the Reform School, because they do not think it possible for a boy to be reformed where new and bad boys are constantly being introduced into his companionship. So we are asked, almost daily, how we prevent the raw recruit, filled with all manner of uncleanness, from so contaminating the entire population of the school as to render nugatory all our efforts towards elevating the moral standard of the whole. Do we separate the good from the bad? In reply to this permit me to quote from [my] last report: 'We make no distinction whatever, based upon the moral character of a boy at the time when he comes under our care. It is our aim to have the moral atmosphere of every part of our institution such that it will stimulate toward well-doing every one who breathes it. We plan at all times to keep the standard of morality among our boys sufficiently high so that a good boy will not be injured, and a bad boy will surely be benefited by contact with those about him. When a boy has determined to become a good boy, and is making an honest effort in that direction, he at once becomes an active agency in the work of bringing his associates into a condition of right thinking and right acting. With a large corps of helpers, composed of our inmates, who have started in the right direction, and who are still remaining with us on probation, proving by their persistence in well-doing that they are strong enough to walk alone, we are constantly aided in the discipline of the institution and are able to have

the predominant sentiment at all times toward the right. Moreover, a boy who is ambitious to "owe no man," sees in the good work he is enabled to do for other unfortunates who have been intrusted to the care of the institution, an opportunity to compensate the State, to some extent, for the good work previously wrought upon himself."

THE UNGRADED SCHOOL AT DETROIT.

This is a day school organized for the special purpose of providing compulsory education for the truants and absentees brought in from the whole city. The Board of Education of the city is empowered by law to set up such a school; and truant officers are required to gather all truants and absentees into the school when so established. The legal name for the school is the ungraded school; but the popular designation is the truant school.

The following extract from the laws of Michigan shows what persons may be sent to this school, and how:

"An act to provide for the compulsory education of children in certain cases.

"Section 3. The following classes of persons between the ages of eight and sixteen years, shall be deemed Juvenile Disorderly Persons, and shall be subject to the provisions of this act.

"CLASS ONE. Habitual truants from any school in which they are enrolled as pupils.

"CLASS Two. Children who, while attending any public school, are incorrigibly turbulent, disobedient, or insubordinate, or are vicious or immoral in conduct.

"CLASS THREE. Children who are not attending any school, and who habitually frequent streets and other public places, having no lawful business, employment, or occupation, which renders attendance at school impossible.

"Sect. 4. It shall be the duty of truant officers, under the direction of the aforesaid school authorities, or their authorized agents, to warn alleged truants and incorrigibles and their parents or guardians of the consequence of belonging to any of said classes of juvenile disorderly persons, as set forth and defined in this act. They shall also, under direction as aforesaid, serve written or printed notice upon the parent or guardian of any child belonging to class one or class two, as described and defined in section three of this act, that said child must begin regular attendance at the ungraded school within five days of the date of service of such notice.

"Sect. 5. They shall also, under the direction as afore-said, give written or printed notice to the parent or guardian of any child belonging to class three, as described and defined in section three of this act, that said child is not attending any school, and require said parent or guardian to cause said child to begin regular attendance at the ungraded school within five days of the date of service of said notice."

Sending a truant or absentee to the ungraded school does not mean a removal from parental control; it only means that attendance at this particular school and submission to its discipline are, after proper warnings, required and enforced. Application to the courts is unnecessary, for the reason suggested, that removal from parental control out of school hours is not contemplated. The truant officer, by virtue of the authority vested in him and acting under the directions of the Board of Education, can compel attendance at the Ungraded School. What the parent loses for the time being is the right to send his child to the school in the district where he lives. The child may be obliged to travel a long way from home to the Ungraded School; moreover, he must carry his dinner and stay all day. He is under the care of the teachers between sessions; and his absence from the school at any time is immediately made known to the truant officers. He is thus

under constant watch; he feels that the hand of the law is upon him and is not going to let him go until he mends his ways.

These inconveniences may seem trivial and hardly to be regarded either as an adequate penalty for acts of truancy or as an effectual warning against the further practice of it. But the testimony of experience is that one term in the Ungraded School is very effectual as a warning against further truancy. Most of the boys (all truants are boys) return to their regular schools thoroughly cured of their waywardness; very few of them ever need a second treatment.

A term in the Ungraded School is quite indefinite in length, this being dependent mainly on the behavior of the boy himself. He may be restored to his regular school after a few weeks, or he may be detained several months; it is in his power to determine.

There are cases, however, which the discipline of the Ungraded School is insufficient for. These are sent to the State Reform School at Lansing. Out of two hundred and eighty-three truants and absentees enrolled in the Ungraded School this year, five have been sent up to Lansing. How many would have been sent up, had there been no Ungraded School, can only be guessed; but those most familiar with the subject affirm their belief that the number sent up would have been many times as great.

The great point about this Ungraded School is that it nips truancy in the bud. Truancy is not allowed to grow into a settled habit. Some measure of punishment, although slight, is brought to bear upon the truant at an early stage in his career. The punishment is not so severe that its application is too long delayed — put off until the habit of truancy has led the boy into vicious company and criminal practices.

The Detroit truant officers are clothed with all the powers of regular police officers. They can arrest truants whereever and whenever found and put them in the lock-up. Boys who stray away from the Ungraded School are pretty sure to be so treated.

But detention in the Ungraded School is not to be viewed in the light merely of a penalty or of a warning; it is chiefly a means of reformation. The truant comes into an excellent day school; is placed under the care of some of the ablest and best teachers in the whole city; is taught how to study, perhaps for the first time in his life; and is rapidly advanced, when once he takes hold of his work, so that he may take a respectable position in his own school when he is restored. The teachers are not overburdened with large classes; thirty pupils being the maximum number, while in other day schools of the city it is fifty. The teachers are of the sort that can lead and do not drive. The discipline is firm and strong, but kind. Its aim is not vindictive justice, but reformation. The principal and his three or four assistants were selected for this work because of their preëminent disciplinary power. They are teachers of the sort that find corporal punishment unnecessary.

The average number of pupils belonging to the Ungraded School is from 75 to 80; but the number varies greatly. In September last the school began with 28 pupils; at the end of May it had 126; and meanwhile there had been entered on the school register no less than 283 names.

A special feature of the instruction given in the school is seen in the attention given to manners and to personal habits. The first lesson taught them, usually, is a lesson in cleanliness. There are ample bathing facilities in the basement; including a large swimming-tank, which the boys are eager enough to use. Towels, combs, brushes, and similar things are provided by the school. Neatness in dress is another lesson; and in the basement are found clothes brushes, shoe brushes and blacking. Needles and thread for mending can be had, and instruction in their use, if necessary. Altogether the civilizing process, often much needed by this class of

boys, is well attended to here, and with very gratifying results.

Mention was made above of returning boys to their regular school. This is not always done immediately after their release from the Ungraded School. The released boys are sometimes sent to a district other than their own; so that, among new associates, they may have a fair chance to turn over a new leaf and make a good record. If they fail after such a trial they are returned to the Ungraded a while longer.

There are two suggestions derived from the experience of the Ungraded School at Detroit which seem worthy of attention; for, although it is only a day school, not taking the boy away from his parents, its discipline appears to be effective enough in the way of reform to make it a species of reformatory.

In the first place, the truant is put under the restraint of the Ungraded School for an undetermined period of time. How long before he shall be restored to full liberty depends upon the truant himself. By good behavior, regularity, punctuality, and earnest work, he may obtain a restoration to his own district-school in the course of a few weeks; or, by deficiency in these particulars, he may prolong the period of his restraint to several months or a whole year. There is no outside power to interfere and grant an undeserved release. Thus the truant is placed under a strong inducement to mend his ways. He has not been accustomed, probably, to the sustained exercise of the will necessary to the making of a good school-record. He is now shown that perseverance in well-doing is the only means of freeing himself from restraint. When this perseverance has done its work, habits of well-doing are established; and this, so far, is reformation. The degree of restraint used at Detroit is, as already pointed out, seemingly inconsiderable; and yet it is affirmed that a single application is enough to work

a reformation in three-quarters of the cases. Thus it appears that the principle of the indeterminate sentence, as it is called, works well when applied to a special day school for truants. Doubtless the same principle would be found to work well in the management of our proposed Parental School. But the one indispensable condition of success is, that there should be no arbitrary interference through a releasing power moved by outside considerations. Upon the boy, and upon him alone, should the length of detention depend.

The other suggestion arising from the experience of the Detroit Ungraded School is this, that probably a large part of our own truancy could be cured by means far less severe than sending the truants to a reformatory. The Detroit treatment is mild; but it is firm, and, above all, is applied at an early stage of the disease. It is believed to cure many boys who, if neglected, would eventually go up to Lansing. The officers are not obliged to waste much effort in urging, and warning, and threatening; they are able to do something that makes the power of the law felt in season to save the boy from more serious consequences.

Suppose the School Committee of Boston had, years ago, set up a day school for truants like the one at Detroit, and managed it on similar principles: might not many a boy have been cured of his waywardness before ever it had been necessary to bring him into court? Might not many have been saved the moral damage of a term at Deer Island? And why not set up such a school now? It would probably save our expected Parental School from becoming overcrowded. It would probably do away with the unsatisfactory practice of "putting on probation," necessarily resorted to under present circumstances in cases deemed to be not fully ripe for Deer Island. It would substitute for threats a little real restraint; it would make the boys feel that the hand of the law was not merely over them, but actually upon them.

The question whether or not the School Committee is already vested with legal authority to set up such a school and enforce attendance thereupon, is suggested for the determination of men learned in the law; and the whole subject, though a little out of the line of the present report, is seriously recommended for consideration. There are possibilities of good in it which ought not to be lost sight of.

CLEVELAND.

During my visit in Cleveland I found that the same want of a proper place for the detention of truants existed there as has existed so long in Boston, and that measures not unlike ours were proposed for supplying the want. It is impracticable to send all habitual truants to the State Reformatory at Lancaster, even if such disposition of them were desirable, which most decidedly it is not. So a truant school for the city becomes a necessity. There are three schools in Cleveland said to be similar in plan to the Ungraded School at Detroit; but these do not meet the difficulty. At present the Superintendent of Schools, with the full approval of the Board of Education, refuses to allow mere truants to be sent to the State Reformatory. Formerly this was done; and, even worse, truants were sent to the City Workhouse, to be with or near adult criminals. But that practice has been wholly broken up. The stigma was too serious a matter; and mere truants not only did not deserve it, but were even spoiled by it. The bad name they undeservedly got only led them to become criminals in earnest. Such a remedy for truancy proved to be worse than the disease; and so it was given up. Now, however, the disease is about to be attacked by more reasonable treatment. A city truant school is proposed not unlike, in its plan, the Parental School expected for Boston. The details of the plan, however, it was too early to obtain.

Since the above was written, a Report of the Special Committee to the Council of the City of Cleveland has been received. This report contains a mass of very interesting correspondence, showing that the views held in Boston, by those who desire the establishment of a Parental School that shall be widely separated from the institutions occupied by criminals and other vicious persons, are likewise held in Cleveland, and for the same reasons. The following conclusions are quoted:

"In the judgment of the committee there is an imperative necessity of providing some home, refuge, or asylum for the reception of the city's waifs and youthful offenders who are not yet confirmed criminals."

"It seems equally clear that the needed institution ought to be wholly separated from the city workhouse, or any other penal institution."

"Careful investigation on the ground and collected information bearing on the subject clearly show that the State Industrial School at Lancaster is not well adapted to the necessities of the case, and that it is incumbent on the city to make suitable provision for such necessities."

"Boys and girls should not be admitted to the same reformatory institution."

"Boys positively criminal should be sent to the State School at Lancaster, and not associated with the unfortunate or simply wayward boys, who should be cared for directly by the city. This matter of wholly separating criminals and non-criminals has received much study of late years, and the unequivocal and almost unanimous verdict of the ablest penologists of this land and other lands is that such separation should be rigidly maintained."

"The 'segregate' or 'cottage' system, in which families of forty or fifty live by themselves in separate buildings, seems preferable to the 'congregate' system, in which hundreds are housed together. It enables the classification of inmates to be made, and makes easier the work of reformation in many ways."

THE STATE INDUSTRIAL SCHOOL AT ROCHESTER, N. Y.

This institution receives boys and girls from the western part of the State of New York. By the last report we find the whole number of different inmates during the year was—boys, 1,023; girls, 200; total, 1,223; and the number at the end of the year—boys, 629; girls, 130; total, 759; which last numbers were about the averages during the year. My observation was limited to the boys' department; but this was thoroughly inspected.

Formerly this institution was a boys' prison. There were walls eighteen feet high around it; prison cells to sleep in, which were locked at night just as in a prison; the boys were known by their numbers, wore a prison garb, marched with the penitentiary locked-step, and in all respects were treated as convicts in a prison and not like pupils in a school. The recent and present management has changed all this. The traits of prison discipline have disappeared. The boys are allowed much freedom. Some of the walls have been pulled down and the rest soon will be. There are locks on the cell doors no longer. Iron bars have been removed from the windows of the old wing, and the windows themselves have been enlarged, where that could be done without danger of weakening the walls. This is in the old dormitory. The new dormitory is a large, open hall with a gallery around it. Single beds cover the floor and gallery. The hall is well lighted in the evening, and boys are allowed to read in bed till nine o'clock. The new dormitory is full, and the old one is used no more than is necessary.

The introduction of instruction in the mechanical trades has had a wonderful effect in changing the spirit of the boys. This and the military drill together have worked a thorough revolution. Formerly the boys under prison discipline were employed on contract work for revenue only - not at all for their own benefit. They were in a state of unrest and insubordination much of the time. Now the boys are at work learning a trade by which they expect to earn a living the day they leave the institution. They are no longer used for revenue, but revenue is used for them. A great change was at once apparent in the boys. Whereas before they were surly or indifferent, now they are alert and pleasant. They are positively enthusiastic about their work. This is the statement of both the present and the former superintendent; and I can easily accept it, for I saw abundant evidence of it in all the shops. One boy, soon to be discharged, had made for himself a handsome tool-chest of quartered oak. This he had furnished with a full set of machinists' tools, mostly of his own making. Boys often make tools which they are allowed to take away with them when they go. Such tools include hammers, pincers, callipers, dividers, cold-chisels, centre-punches, surface-gauges, and try-squares. Some specimens of these I was invited to select for myself, and I did so. The boys had made a little planer about thirty inches long, a model of the large one in the shop. Altogether, I can say that their iron and machine-shop work were not inferior to that of any boys of the same age I have ever seen elsewhere.

The wood-working shop is furnished with benches of excellent design, — a bench on one side, a lathe on the other, — made under the direction of Captain Fulton, now of Cincinnati. Each boy has a bench which is exclusively his, for the time being. He has a separate kit of tools, which he is expected to keep in perfect working order all the time. The specimens of work done are decidedly good. The instruction is thorough, though not very comprehensive. Probably the short time the boys stay in the institution explains the want of comprehensiveness.

A good many castings, both in iron and in soft metals, are

made by the boys. There is a cupola for iron casting. The work is, on the whole, rather elementary. The models, which are made in the wood-working shop, are sometimes made accurately from working drawings, and used for iron castings required to be of given dimensions; but more frequently the articles cast are ornamental things easily modelled freehand in clay or carved in wood. There are some excellent specimens of work in clay modelling. Occasionally a boy is discovered to possess a remarkable talent for clay modelling; and the encouragement given to use that talent has been the making of the boy.

But not in this branch alone; there are such cases in all branches of work. A certain boy who had been persistently sour and unresponsive for a long time after entering the school, showing equal aversion to books and to work, was observed, nevertheless, to be rather fond of lingering about the machinery when he had a chance, and to show some little interest in the work of cleaning it. One day he was shown how to hold a turning-chisel and how to turn a bead. The boy tried his hand at the work; he had good success, and actually laughed out loud with joy. He went on, after this experience, learning one process after another with great enthusiasm. In due time he became a good workman, and was discharged. He now has a good place in a machine-shop, and is earning high wages. This case illustrates how boys are saved to themselves and to society by discovering their one talent and making the most of it. The aim of the school is to make each boy a good craftsman of some sort. Time enough is taken to do this when the circumstances admit, and it has been done successfully in a large number of cases.

The bricklaying and the plastering showed some excellent plain work and some fairly good ornamental work. The boys have done a good deal of work upon the institution buildings—earpentry, bricklaying, and iron work.

So far as I have learned, this is the only boys' reformatory in the whole country in which the industrial instruction has been put upon a thoroughly educational basis. The so-called industrial training given in such institutions has usually consisted partly of contract labor and partly of domestic work, the latter including some shoemaking and tailoring, and occasionally printing; but all carried on primarily for the advantage of the institution. Systematic instruction in the mechanic arts, either by the Russian method or by the trade-school method, has been attempted in but few institutions as yet; and among these few, that at Rochester takes the lead by a long way.

Great popular interest has been awakened by this new instruction. The Legislature of New York having abolished contract labor, instruction in trades became a necessity; but at the same time increased appropriations became necessary to support the school while its inmates were engaged on unproductive labor. The public mind needed to be informed upon the nature and results of the new instruction. Advantage was taken of the great agricultural fair held at Rochester two or three years ago. Space being secured, there were sent two benches, two lathes, two outfits for painting and graining, two forges and anvils, two engine lathes, two bricklayer's stands, two plasterer's kits - indeed, two of every kind of apparatus needed for every trade then being taught in the Industrial School. Relays of boys were sent down to work at these benches under instruction during all the hours the exhibition building was open; each boy, however, being required to work only two hours, and then having leave to look about. These, of course, were the more trustworthy boys. The crowd of people around these working boys was great and constant—eight or ten deep most of the time. One gentleman sought out the Superintendent and inquired where the school was in which boys were taught thus to work. "The school is here in Rochester," was the

reply. "What is the tuition?" "It is a free school." "Well, I have two sons I would like to send." "Unfortunately," replied the Superintendent, "your sons could not be received until they had been found guilty of some felony entitling them to admission."

To the foregoing notes may properly be added some extracts from the Forty-second Annual Report of the Managers, a document of unusual interest and value.

On the matter of high walls this is said:

"The Board confidently expects such action by the legislature as will result, in the near future, in the removal of every unnecessary obstruction now within the enclosure of twelve acres which contains the buildings and shops, and also the removal of such other relics of the prison system as may serve by their presence to convey to the minds of children the impression that they are being confined for punishment and dealt with as criminal. These observations relate to the buildings of the institution and the division walls. The practicability and advisability of removing the outside walls, or of cutting them down to the height of an ordinary fence, is not at this time regarded as important to be discussed, for the reason that the plans of the management for the extension of the military department and the establishment of a patrol system, using our cadets exclusively for that service, have not yet been carried out, and many changes and improvements must be made and additional privileges created before the advocates of such a measure would urge it upon the attention of the Board. But it is a significant fact that boys who are sent out into the city upon their honor, disdain to take advantage of the trust reposed in them; and yet sometimes the same boys will attempt to scale the walls and thus escape, selecting the very highest place for their attempt."

Of the military organization, which appears to the visitor

to be in efficient working order so far as now carried out, the managers express a very high estimate, particularly as a means of general discipline. The following is their language:

"The military department - which was inaugurated prior to our last report - has surpassed even what was expected of it by this Board. The military instructor handles this whole department within itself, with the assistance of the boy officers of the department. It is wholly officered by the inmates. It not only improves the carriage, the address, the physique, and the general deportment of the individual boy, but through it the management is enabled to handle this large number of boys, when out of the schools and shops, with as small a force of officers as were used when there were only about half as many inmates. A large portion of the work of handling the boys and preserving order in the shops and schools, as well as out of them, is done by the military officers, and, in the main, it is well done. The military spirit among the boys has been gaining strength steadily since the organization of this department. During the last year, uniforms for all, and proper insignia of rank for officers, have been provided. The effect of this has been most excellent, and it is the intention of the management to furnish guns for drilling. The beneficial effect of the efficient manner in which this department has been conducted cannot easily be overrated."

On the teaching of trades the same report has the following:

"It is believed that the Technological Department of the institution is doing more towards the accomplishment of the purpose for which the institution is maintained than was expected of it by the management. Through its agency the productive capacity of the inmate is greatly increased. When discharged, he has at hand the means of self-support. He knows at once in what direction to seek for labor, and

when he obtains employment he obtains it in the exercise of some regular trade, and is so freed from the temptations incident to irregular work interspersed with periods of idle-In the shops, the instruction is systematic and scien-Instruction being the primary purpose, and production tific. of only secondary importance, the scholars obtain facility in their various trades with much greater rapidity than do those who work as apprentices in similar trades in the shops of actual manufacturers. The boys delight in the work. They feel that it is not a task to be performed for another, but, rather, a lesson to be learned for their own benefit. no uncommon thing to have the boys beg for the privilege of remaining in the shops, at their benches, during the hours set aside for play. Instruction in mechanical and freehand drawing has during the year been given to all the scholars in this department, and in each mechanical shop the boys are instructed to make their own drawings and to work from drawings and written specifications. We have now fourteen departments of instruction, one, that of printing, having been added since our last annual report."

The following extract relates to the history of the institution, and to the observed effects of its former prison discipline:

"The Act prohibiting the contracting of children's labor, passed in 1884, reduced at once the annual income of the institution about twenty thousand dollars; nevertheless, it was a wise measure. During the first fifteen years of the active existence of the institution, from 1851 to 1865 inclusive, the earnings of the children, averaging in numbers three hundred and forty-four, were \$208,937, while the amount appropriated by the legislature for support was only \$296,611. The average cost per capita per annum for maintenance was less by a large percentage than at any other time in the history of the institution. For twenty years this same system of management was continued under the same

superintendent, and upwards of twenty-five hundred boys were graduated from the institution. Ten years later, when Dugdale investigated the State's prisons, these boys had become men, and it was then disclosed that all this money had been earned and saved at a fearful cost to the delinquent children, to society, and to the tax-payers of the State. The figures and statements of Dugdale indicate that the permanent support of a large percentage of children was by this system imposed upon the tax-payers of the State.1 Confirmatory of the correctness of the facts and inferences stated, the journal of the institution, kept by its principal officer during the period referred to, speaks of plots by boys, involving concerted attempts with deadly weapons upon the lives of officers, and a condition of insubordination and tendency to violence kept under by brute force, and a system of discipline similar to that which the legislature found necessary to abolish by statute in the prisons of the State.

"The demands of the people for a showing of large earnings and a low rate per capita was met. Time has revealed the results of this false economy. The Board demands means with which to educate boys so as to create wage-earners and producers rather than a class of paupers, convicts, or destroyers."

But the Industrial School at Rochester is not in any sense a school for truants, nor is it used as such. Truancy is doubtless the evil way that has led many a boy to the crime which brings him here; but truancy of itself is not a cause of commitment. Meanwhile the streets of Rochester "are filled" with boys and girls whose waywardness, idleness, and truancy are causing grave alarm. From a report read before the Humane Society, and printed in the "Rochester Democrat," June 4, 1891, the following is clipped:

¹ What Dugdale discovered and astounded the public mind by publishing was the fact that unduly large numbers of adult criminals in the State's prisons had been "house-of-refuge boys." So far did reformatories fail to reform, they were rather to be regarded as schools of crime.

"The reëstablishment of a truant-house in Rochester is urgently needed. There are many children who refuse to go to school and over whom their parents have no sufficient control. Such children ought to be brought up under kind but strict discipline. But there is no place for them. They have committed no crime and cannot and ought not to be placed in a penal institution. Then there are children whose parents serve a term in the penitentiary. The children have done no wrong, but they have been surrounded by vice and lived under the most corrupting influences, so that they ought not to be brought into contact with other children until after a period of probation. For such as these a truanthouse would be a great blessing. Neither this, however, nor the temporary shelter of the Humane Society, would receive children for whom a place is now provided elsewhere."

THE NEW YORK STATE REFORMATORY AT ELMIRA.

"Visit Elmira by all means," said everybody whose advice was asked concerning the institutions to be selected as best worth visiting. So the visit was made, and most interesting and instructive it was.

But the bearing of what was there learned on the particular matter now under consideration is general rather than special. The same principles which we desire to see applied to the management of a truant school are applied at Elmira to the management of a species of prison with a thoroughness, vigor, and success that have attracted the attention of the whole country and of the leading European nations as well. Much has been written about this, and there is no doubt that the example of Elmira has led to reforms in other States—reforms touching the management not only of prisons but also of juvenile reformatories.

The inmates at Elmira are young men sixteen to thirty years of age at commitment. They are in prison. If

there had been no State Reformatory at Elmira, their place of confinement would have been the State's prison. Their crimes are of the grade known as State-prison offences. Therefore we should not expect to find in the buildings nor in the external features of the management at Elmira suggestions specially useful for a school of young boys not yet criminals.

It is only because the visitor at Elmira can study on a large scale the actual working of certain principles of modern penology, believed to have wide and varied applications elsewhere, that a visit to this institution is valuable to persons not directly concerned with prison management. No better laboratory or museum of practical psychology exists in this country, probably, than this at Elmira. The lessons to be learned here are as valuable considered as contributions to pedagogy as they are in any other sense. undetermined sentence, the grades and honors, the parole, the conditional and the final release; the operation of these circumstances upon the prisoner's mind; the reëstablishment of self-control, of worthy purposes, and of industrious and frugal habits - all these things and many more can be studied in their practical aspects in the cases of the ten or twelve hundred men undergoing remedial treatment at this psychological hospital, so to term it, at Elmira. But to describe all this, or even so much of it as came under my personal observation, would unduly prolong, and postpone the completion of this report.

ACKNOWLEDGMENTS.

I may be permitted here to record my grateful acknowledgment of the courteous assistance received from all officials and other interested persons whom I met in the course of my tour of inspection. Especially is such acknowledgment due to those here named:

- Major T. J. Charlton, Superintendent Indiana State Reform School for Boys, Plainfield, Ind.
- Captain Levi S. Fulton, Superintendent Cincinnati House of Refuge.
- Mrs. Ursula L. Harrison, Superintendent, and Mr. L. O. Dudley, General Manager Illinois School of Agriculture and Manual Training, Glenwood, Ill.
- Mr. Albert O. Wright, Secretary of the Board of Charities and Reform, Madison, Wis.
- Mr. W. W. Murray, Superintendent State Industrial School, Rochester, N.Y.
- Mr. Z. R. Brockway, General Superintendent New York State Reformatory, Elmira, N.Y.

THE PARENTAL SCHOOL IN BOSTON.

The points considered essential in the organization and management of the expected Parental School in Boston are all embraced in the one fundamental idea suggested by its name. The following are regarded as the most important:

- 1. The boys should be grouped in families of moderate size, age and moral condition being considered in the grouping.
- 2. The families should dwell in separate cottages, designed to receive twenty-five or, at most, thirty boys each.
- 3. The family life in these cottages should be as complete and home-like in all its incidents as possible. Meals should be taken in the cottage dining-rooms.
- 4. Each house should be under the care of a master and a matron house-father and house-mother, if these terms be preferable.
- 5. It would be well to lodge a third adult in each cottage, and to assign to him or her some of the domestic cares.
- 6. All the domestic service should be performed by the boys, under skilled direction.

- 7. The boys should have school instruction three hours a day.
- 8. There should be thorough instruction in manual training; but, in view of the rather short periods of detention and the insufficient age and strength of many of the boys, such instruction cannot be expected to go far into tradelearning.
- 9. If there is to be land for the purpose, let instruction in gardening be given.
- 10. The domestic service and the instruction in other forms of labor may fill three hours a day.
- 11. The study of books, the reading, the recreation, as well as the meals and other employments of the day, should be incidents of the family life in the cottages.
- 12. The chiefly important thing in management is to secure the appointment of a superintendent eminently qualified for the peculiar duties of the position. The salary should be large enough to command the best man who can be found.
- 13. Release from the school should always be earned by good conduct, industry, and learning on the part of the boy; never by influence acting from the outside.
- 14. The buildings considered necessary are the following:
- (1.) A central building for the offices, superintendent's apartments, kitchen, laundry, bakery, and store-rooms.
- (2.) A school building with two or three class-rooms and a manual-training room on the first floor, and on the second a hall large enough to seat the whole school for religious services and for other exercises.
- (3.) Cottages three or four to begin with neat and substantial, but inexpensive.

Each cottage should contain:

(a) First floor, or out-of-ground basement: play and sitting room, bathing-room, and store-rooms.

- (b) Second floor: dining-room, pantry, hospital room, matron's apartment.
- (c) Third floor: six sleeping-rooms for boys and two rooms for officers.

There should be good and safe fire-escapes leading from the sleeping-rooms.

- (4.) A stable and tool-house, if land is to be cultivated as garden or otherwise.
- 15. The grounds should be enclosed by a fence or wall of no more than ordinary height. No provision against escapes is desirable.

Respectfully submitted.

EDWIN P. SEAVER, Superintendent of Public Schools.



SCHOOL DOCUMENT NO. 21-1891.

REPORT

OF THE

COMMITTEE ON MUSIC.

DECEMBER, 1891.



 $$\rm B\ O\ S\ T\ O\ N\ :$$ ROCKWELL AND CHURCHILL, CITY PRINTERS.

In School Committee, Boston, Dec. 8, 1891.

Accepted, and one thousand copies ordered to be printed.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

In School Committee, Boston, Dec. 8, 1891.

The Committee on Music respectfully submit the following report:—

There are at present five special instructors of music employed by the Board. One of these instructors has charge of the instruction in music in the high schools, including the Girls' Latin School. Music is not provided for in the course of study for the Boys' Latin School, and no instruction in that branch is given in that school.

Grammar and primary schools of the city are divided into four districts, and one district is assigned to each of the four remaining special instructors. The assignment of schools and districts to special instructors in music is as follows:—

HENRY G. CAREY. — Girls' Latin, English High, Girls' High, Roxbury High, Dorchester High, Charlestown High, West Roxbury High, Brighton High, East Boston High Schools.

Hosea E. Holt. — Normal, Rice, Wells, Eliot, Hancock, Bigelow, Gaston, John A. Andrew, Lawrence, Lincoln, Norcross, Shurtleff, Thomas N. Hart, Bowdoin, Phillips Schools.

J. M. Mason. — Adams, Chapman, Emerson, Lyman, Bunker Hill, Frothingham, Harvard, Prescott, Warren, Brimmer, Quincy, Winthrop Schools.

James M. McLaughlin. — Comins, Dearborn, Dudley, Dillaway, George Putnam, Hugh O'Brien, Lewis, Lowell, Martin, Agassiz, Bowditch, Charles Sumner, Mt. Vernon Schools.

LEONARD B. MARSHALL. — Prince, Dwight, Everett, Franklin, Hyde, Sherwin, Allston, Bennett, Edward Everett, Gibson, Harris, Mather, Minot, Henry L. Pierce, Stoughton, Tileston Schools.

Music is taught in the schools in part by the special instructors, and in part by the regular teachers, who give instruction under the direction and supervision of the special instructors.

It is somewhat unfortunate for this particular branch of instruction that of late it has not received the attention which is due to it. Owing to the ever increasing demands made upon the public schools to keep them abreast with the times; owing, furthermore, to the fact that the funds which were so liberally supplied by the city were absorbed by other departments which needed them as much, if not more; owing, finally, to a difference of opinion in regard to music text-books which divided the members of the Committee on music, the task of the special instructors of music has been a difficult one, and had it not been for their ability, their unswerving faithfulness to their duties, and their love for their art, the results would have been far from satisfactory.

The number of schools, classes, and pupils is constantly increasing, although the time assigned to the special instructors of music remains the same; and the material with which they are expected to accomplish their work is not always forthcoming. The prospects are that after the schools now in process of erection are completed and occupied, the demands upon the instructors in music will reach proportions with which they will be unable to cope.

It cannot be expected that an art like music can be taught uniformly all over the city. Art defies uniformity. It depends upon the taste and the personal gifts of the instructor. Four able teachers may obtain equally good results, but they will reach them by four different routes. Unless the feasibility of the plan can be demonstrated which asks

for only one musical director, whose duty it would be to instruct the teachers and to supervise their work, but not to teach the classes in person, a certain latitude will have to be granted to each of the several instructors as to the means by which they know they can obtain ultimately the best results.

It is therefore not surprising that such conditions should have naturally developed that each of the four instructors teaches music as he thinks best.

In the first district the books of the Normal Music Course are the authorized text-books; and, referring to them, Mr. H. E. Holt has evolved the following course of study:—

The first and most important work to be done in teaching vocal music in our schools is to secure perfect intonation and the proper use of the voice. Having secured this, each teacher is given a card of exercises, like the following: -

FOLLOW THIS ORDER OF EXERCISES.

No.

SERIES B,

(Undivided Beat.)

SECOND READER.

Ex. 1, 2, 5, 19, 21, 28, 29, 31, 131, 132, 133, 134, 135, 154, 160, 166, 168, 184, 64, 65, 79, 80, 81, 136, 140, 142, 148, 199, 203, 207, 32, 33, 44, 45, 46, 47, 82, 91, 92, 97, 100, 103, 215, 221, 223, 233, 236, 238, 239, 240, 104, 106, 108, 112, 56, 57, 60, 61, 63.

SECOND SERIES OF CHARTS.

Ex. 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 54, 56, 59, 60, 62. Second Reader Ex. 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 258, 259, 260, 277, 278, 285, 314, 327, 329, 341, 346, 293.

These cards are arranged for the work of the different grades and refer to the exercises in the books and charts of the Normal Music Course. The teacher proceeds to teach music as she teaches other studies. There are two series of cards like the above — one for use in the primary schools and the other for use in the grammar schools.

In the second district the books of the Revised National Course are used, and in conformity with these Mr. J. M. Mason has arranged the following course of study: -

Primary: First Year.

First. — The children should be taught simple, short songs, or musical phrases, by rote; particular attention being given to good position, distinct articulation, pleasant quality of tone, and proper accent.

Second. — They should be taught to sing the scale from different pitches within easy range of the voice, ascending or descending; with the scale syllables (do, re, mi, etc.), numerals, or any single syllable or word. They should also sing frequently from the scale diagram, following the movements of the pointer, as directed by the teacher.

Third. — Short exercises in rhythmical form should be written (in figure notation) on the blackboard and sung by the class and individually.

Fourth.—The staff may be placed on the blackboard without clef, and the scale written upon it in different positions to be sung with syllables and numerals.

Primary: Second Year.

Introduce the G clef, explaining its use, and fix the place for G on the staff by frequent reference to it. If a C pitch-pipe or fork is used, it will be well to let the children take their pitch from that, and sing down or up, as the case may be, to the pitch of G. Taking that pitch for one, they should practise frequently on the first six sounds of the G scale, by scale names, pitch names, and syllables, both from the diagram and from the staff. This practice should never be neglected. Continue also the practice of the whole scale from different pitches, as in the first year. All the exercises on the charts for this grade are based on the pitch of G, and it should be constantly adhered to, never allowing them to fall from the proper pitch. The time exercises at the top of some of the charts should be thoroughly practised, both in concert and individually. All the songs and exercises on the staff should be sung by syllables, and may also be sung by scale and pitch names. The pitch names should be frequently used in the practice of the scale.

Primary: Third Year.

Review the work of the previous year from the books, with special attention to individual singing. The pitch (of C) should now be taken for one, and the scale practised until the pupils are familiar with its representation on the staff. The intonation exercises in this key in the music reader should now be sung by syllables and pitch names, with special attention to strict time; also the exercises on the charts in this key. The scales in all the keys are to be practised in the same manner, and the exercises and songs to be sung by syllables. Practice on pitch

and time should be continued as in previous classes. Review from the music readers.

Grammar: First Year. (Sixth Class.)

Daily practice on the scale with syllables and pitch names. Practise carefully all time exercises, with strict attention to accent. All exercises on the staff should be sung by syllables and pitch names, with strict attention to time and accent. See that the various signs of notation used in each exercise, *i.e.*, notes, rests, clef, bars, measures, time marks, etc., are clearly understood. Insist on good position, with books well raised.

Grammar: Second Year. (Fifth Class.)

Practise the chromatic scale with sharps, by scale name, pitch name, and syllables, using the diagram and the staff. Keep up this practice all through the term, so that the ear may become thoroughly familiar with these sounds and the eye with the notation. Practise all the exercises and at least one song in each of the sharp keys by syllables, and the songs by words. Practise the scales in the various keys slowly, with pitch names. Next, take the chromatic scale with flats in the same manner as with sharps, and follow with exercises and songs in flat keys. The pitch names of the scale in the various keys should be memorized.

Grammar: Third Year. (Fourth Class.)

Review the chromatic scale with sharps and flats frequently; also the scales in all the keys. Practise thoroughly all the chord exercises from the Third Chart or Music Reader, until the tones of the various chords can be as readily sung as the scale. These exercises should be frequently reviewed. Practise carefully the time exercises preparatory to the songs. Songs in the different keys may be studied in connection with these exercises.

Grammar: Fourth Year. (Third Class.)

General review of previous work.

The work of this grade may be continued in the Third Reader, taking the chord exercises and songs in three parts, or the Fourth Reader may be used, taking the simpler solfeggios, third exercises, and songs. The scale and exercises in the minor mode should be carefully and frequently practised. If the Fourth Reader is used, the F or bass elef should be explained, and the bass parts may be sung by the altos an octave higher than indicated by the clef. When new songs are taken up for study the pupils should be questioned on the key and time signatures, accents, chromatic notes, etc.

Grammar: Fifth and Sixth Years. (First and Second Classes.)

The groundwork having been generally covered in previous classes, there is nothing new in theory for this grade, but abundant opportunity for practice on the more difficult solfeggios and songs.

In the third and fourth districts the instructors are still obliged to use the *Old National* Course; and, while they claim that the material granted to them does not allow them to bring out their best work, they do the best they can with the material furnished.

Mr. James M. McLaughlin's course of study is as follows:—

FIRST PRIMARY.

The scale — with "ah — oh."

with "oo - oh - aw - ah - ai - ee."

The names - one, two, etc.

The syllables — do, re, etc.

Attention to purity of tone, correct formation of useful words — koo, low, etc.

Soft singing.

Cultivation of higher register.

Idea of constant measurement of time through the pendulum.

Two-part measure.

A practice card is furnished all primary-class teachers.

Suitable and attractive rote songs.

Representation of scale on diagram and staff.

SECOND PRIMARY.

Review.

Completion of theory of major scale.

Staff, elef, pitch, position.

Two-part measure.

Complete development of undivided beat.

Technical exercises — sight singing.

Rote singing — well-defined forms.

THIRD PRIMARY.

Singing from staff representation of scale in all its positions.

Complete development of three and four part measures, undivided beat.

Rote singing — more extended forms.

All available exercises in First National Reader.

Elementary two-part exercises and songs.

SIXTH. GRAMMAR.

Second National Reader.

Review of primary study.

Keys of C, G, D, A, E.

Incidental theory.

Exercises and songs in two, three, four, and six part measure, p. 7 to p. 62.

Divided beat.

Two equal sounds to the beat. Key of C. Available exercises and songs, p. 22 to p. 33.

Two-part song, p. 26 to p. 63.

FIFTH GRAMMAR.

Review.

Keys continued — F, Bb, Eb, Ab.

All exercises, songs, etc.

The more common accidentals.

Chromatic sounds.

FOURTH GRAMMAR.

Review.

The nine keys — common.

Chromatic scale.

Third National Reader.

Intervals as presented, p. 7, etc.

The minor scale.

Passing and auxiliary notes, p. 16.

Appogiatura (and acciacatura), p. 20.

The exercises and songs illustrative.

Three-part singing. Third Reader.

THIRD GRAMMAR.

Review and continuation of keys.

Fourth Music Reader.

All exercises from p. 50 to p. 85. Graded by instructor according to difficulties of melody and rhythm. All hymns and songs in the Reader

embodying progressive theoretical principles, and selected from different portions of the Reader.

Two and three part singing.

SECOND AND FIRST GRAMMAR.

Review.

Completion of cycle of keys.

Complete presentation of the various forms of measure.

Analysis of musical form.

Motive, phrase, section, period.

Illustrative examples from reader.

Explanation of musical forms.

Practice and theory of all the keys.

Major and minor.

The modes.

Transition.

Modulation.

Transposition.

Relation of keys.

Major to major — minor to minor.

Minor to major — major to minor.

Relative and tonic majors and minors.

Elementary principles of harmony.

Chords — triads and inversions.

Four-part chords and inversions.

Relation of chords.

Analysis — synthesis.

Application of all theory to exercises and songs in Fourth Music Reader. Supplementary selections from "The Coda" in some of the grammar schools.

Mr. Leonard B. Marshall's course of study is as follows:—

First Year.

Mental study of the major scale above the key-note.

Calling and pointing from the scale-ladder, following a systematic order of developing the tones.

Calling and pointing from the scale-ladder, developing the intervals above and below the key-note.

Mental work, in time, —establishing the rhythmical effects of two, three, and four part measures. Illustrations of the simple forms of measure upon the board.

The scale representation upon the board.

Exercise in pointing and calling for sounds from the notes.

The teacher will write notes, and the pupils will sing.

The teacher will call for the sounds, and the pupils will sing and also write notes.

Easy exercises may be written upon the staff, both in numbers and in notes, in various positions of the scale, for the pupils to sing

Easy tests may be given, in the recognition of sounds, by the teacher.

In vocal practice use the vowel shapes ä, ō, ē, or n. Give examples in visible speech.

During the first year some beautiful songs for imitation should be taught, so that the children may gain ideas in expression and the use of words.

Careful attention should be paid to the quality of tone, the voices being kept within a reasonable limit.

Second Year.

Review all of the work of the first year. Teach and represent additional scales. Practise from the same.

Sing exercises 8, 10, 12, 13, and the last on page 4 in the Reader.

Exercises 17, 18, 19, and the song on page 5.

Exercise on page 7.

Exercise and song on page 8.

Songs on pages 70, 13, 28, 31, 29, 12, 25, 20, 76, 36, 9, 11, 71, and 10.

Third Year.

Review the work of the two previous years. Develop six-part measures.

Sing the songs on pages 56, 30, 58, 89, 74, 32, 61, 68, and 86.

Fourth Year.

Scale practice and drill in time elements. Refer incidentally to all matters relating to scale representation and to the various signs used in written music.

Sing all the work on the first twenty-five pages of the Reader (Second).

Songs on pages 28, 29, 30, 32, 33, 34, 41, 42, 45, 49, 52, 56, 58, 61, 63, 66, 72, 80, 84, 87, 89, 93, 96.

Fifth Year.

Review the work of the previous year, singing some of the songs in two parts that were studied before in one part. Teach the chromatic

tones. Present additional elements in time. Represent the foregoing, and drill from the same. Give tests in tone and time perception.

Sing in the Second Reader the songs on pages 35, 36, 38, 46, 47, 48, 50, 52, 54, 57, 59, 60, 64, 67, 68, 74, 76, 79, 81, 85, 90, 92, and 95.

Sixth Year.

Review much of the work of the fifth year. Present and develop the minor scale. Represent it and drill upon the same.

Sing the exercises upon pages 7 and 8 in the Third Reader; also upon pages 9, 10, and 11.

Sing exercises and song on pages 21 and 22.

Sing the songs on pages 12, 13, 15, 16, 18, 19, 20, 25, 26, 27, 31, 40, 42, 48, 50, 52, 54, 55, 56, 58, 62, 63, 64, 66, 68, 74, 78, 92, 93, and 96.

Seventh Year.

Increased difficulties in pitch and rhythm. Exercises in one, two, and three parts, covering work in the major, chromatic, and minor keys, with the G and F clefs.

Songs in two, three, and four parts, from the Fourth Music Reader. Pay careful attention to the carrying of the parts, to the classifying of the voices, to the blending of the same, to the quality of tone, and to the rhythmical effects produced.

Eighth Year.

Same as the work of the seventh year, with additional songs and exercises.

Ninth Year.

The work of this year should be a recapitulation of that of the preceding years. Each topic should be briefly touched upon and hastily reviewed. The work sung should be more varied and difficult than in any former year. It should be as elaborate as the ability of the pupils will allow.

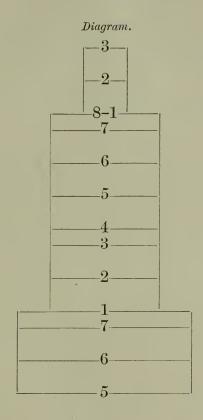
Careful attention should be given to the classifying of the voices, to the carrying of the parts, and to the cultivation of taste and style in rendering.

Additional exercises and songs in two, three, and four parts, from the Fourth Music Reader.

To assist the teachers, a card containing the following has been prepared:—

METHOD OF DAILY WORK.

- 1st. Mental Work: calling for sounds as below.
- 2d. Diagram Work: pointing to names of sounds in foregoing order on diagram, to be placed on the board, as below.
- 3d. Staff Work: pointing to representation of sounds in the same order on the staff, to be placed on the board, as below.





Ah - oh - oo - oh - aw - ah - ai - ee.

A METHOD FOR FIXING IN THE MIND EACH SOUND OF THE MAJOR SCALE.

Sing the Scale, — Do, Re, Mi, etc., up and down, repeating upper Do. Sing the Names, — 1, 2, 3, 4, 5, 6, 7, 8, — 8, 7, 6, 5, 4, 3, 2, 1.

1. The First Sound to be fixed.

Sing 1, 2, 1, —1, 2, 3, 1, —1, 2, 3, 4, 1, —1, 2, 3, 4, 5, 1. (Pupils answer with syllables, Do, Re, Do, — Do, Re, Mi, Do, — etc., also Koo, etc.)

5. The Second Sound.

Sing 1, 2, 3, 4, 5, — 5, 4, 5, — 5, 4, 3, 5, — 5, 4, 3, 2, 5, — 5, 4, 3, 2, 1, 5, — 1, 5.

8. The Third Sound.

Sing 1, 2, 3, 4, 5, 6, 7, 8, — 8, 7, 8, — 8, 7, 6, 8, — 8, 7, 6, 5, 8, — 5, 8, — 8, 7, 6, 5, 4, 8, — 8, 7, 6, 5, 4, 3, 8, — 8, 7, 6, 5, 4, 3, 2, 1, 8, — 1, 8.

3. The Fourth Sound.

Sing 1, 2, 3, — 3, 2, 3, — 3, 2, 1, 3, — 1, 3, — 3, 4, 3, — 3, 4, 5, 3, — 5, 3, — 3, 4, 5, 6, 3, — 3, 4, 5, 6, 7, 8, 3, — 8, 3.

Review.

Sing 1, 5, 1, -1, 5, 8, -8, 5, 8, -8, 5, 1, -1, 3, 1, -1, 3, 1, 5, -5, 3, 5, 1, -8, 5, 3, 8, -3, 8, 3, -5, 3, 8, -3, 5, 1.

To fix other Sounds, follow the same plan, e.g., 6.

Sing 1, 2, 3, 4, 5, 6, -6, 5, 6, -6, 5, 4, 6, -6, 5, 4, 3, 6, -6, 5, 4, 3, 2, 6, -6, 5, 4, 3, 2, 1, 6. -1, 6, -6, 7, 8, 6, -8, 6.

Most of the time of the four instructors of music is spent in personal work in the grammar schools. They visit each of them once a week, and spend almost the whole day in teaching. But little time is left for visiting primary schools, and thus the fundamental instruction, upon which the whole structure should rest, cannot receive proper attention.

Whenever they are able to make a call at a primary-school building, once perhaps in two months, they can merely give a few words of advice to the teachers, or examine a class for a few minutes. On account of the lack of time, and the consequent infrequency of the visits of the special instructors to the primary schools, their influence upon the instruction in music in these schools is not great, and is not what it ought to be.

In the opinion of your committee the time will soon come, if it has not arrived already, when the staff of instructors in music will have to be enlarged, so that better attention can be paid the primary-school work.

For the Committee,
SOLOMON SCHINDLER,
Chairman.



REPORT

OF THE

DIRECTOR OF PHYSICAL TRAINING.

DECEMBER, 1891.



 $$\mathrm{BOSTON}:$$ ROCKWELL AND CHURCHILL, CITY PRINTERS. 1 8 9 1 .

In School Committee, Boston, Dec. 8, 1891.

Ordered, That the Director of Physical Training be authorized to report to the Board in print, and that one thousand copies of the report be printed.

Attest:

PHINEAS BATES,

Secretary.

REPORT.

To the School Committee:

I beg to submit the following report:

In accordance with the terms of my election to the office of Director of Physical Training, I reëntered the service of the city of Boston on January 1, 1891, after an interval of thirteen and one-half years. I at once began visiting schools of all grades, from the Kindergarten to the High school, having a twofold purpose in view. In the first place, I was desirous to familiarize myself with the main features of the organization and administration of the schools; and secondly, I wished to obtain an idea of the character and extent of the physical training which had been introduced into the schools, in accordance with the vote of the School Committee, on June 24, 1890, which reads as follows:

"Ordered, That the Ling or Swedish system of educational gymnastics be introduced into all the public schools of this city."

Toward the end of February I addressed a circular letter to the principals of schools: in response to which I received a statistical return, covering the month of January, 1891, regarding all High, Grammar, and Primary schools.

The return showed that upwards of 1,100 teachers were giving gymnastic instruction, for some 17 minutes daily, to their classes. In some schools the old memorized gymnastic drill had been continued, pending the appointment of a Director of Physical Training; but the greater number of teachers, in the Grammar and Primary schools, were

engaged in an honest attempt to teach the Ling free standing movements. Counting the masters of the 55 Grammar schools, 1,120 teachers, in the Grammar districts, were returned as teaching gymnastics, of which number, below the grade of master, 844 were teaching Ling gymnastics, and 221 teaching what may be termed not inaptly "mixed gymnastics." The best results were observed in those schools whose masters had attended the Teachers' Classes of the Boston Normal School of Gymnastics, and had taken particular pains, besides, to lead, assist, and criticise their teachers in the work of class instruction in gymnastics. In certain schools extremely creditable results had been attained, especially in those where the teachers had formed themselves into classes and hired special instructors in the Ling system to give them normal lessons.

It gives me pleasure to say that I have been much surprised and gratified by the interest, zeal, and intelligence shown by the teachers of the Grammar and Primary schools, as a body, in the subject of physical training.

Since April 1, 1891, I have availed myself of the invaluable services of Mr. Hartvig Nissen, who was elected Assistant Instructor in Physical Training, March 10, 1891. Mr. Nissen has assisted me in visiting and inspecting schools, and has conducted normal classes in the Ling gymnastics for the teachers of the Grammar and Primary schools. Two inspections of the Grammar schools have been made since they opened on September 9. On the basis afforded by the first inspection: 8 were rated "excellent"; 18 "good"; 17 "passable"; and 12 "poor." The result of the second inspection is as follows: 8 were marked "excellent"; 20 "good"; 20 "passable"; and 7 "poor."

I propose to continue such classes until the classwork in the schools shall show that the average teacher has grasped the main principles of the Ling school gymnastics and is able to carry them into effect. Early in 1890 I was engaged by Mrs. Mary Hemenway to deliver a course of lectures on Physical Training before the students of the Boston Normal School of Gymnastics. These lectures were given in the Old South Meeting-House, at noon, on six Saturdays, viz., March 21 and 28, April 18 and 25, and May 2 and 9. Through the kindness of Mrs. Hemenway the lectures in question were thrown open to all teachers of the Boston Public Schools. I was thus enabled to meet so many of the teachers as cared to consider the salient facts regarding the origin, development, and characteristic features of the principal types and systems of physical training.

I also addressed the masters of the Grammar schools upon "Physical Training in the Boston Schools" at the May meeting of the Masters' Association.

In accordance with an order of the School Committee, which was passed May 12, Mr. Nissen gave special normal instruction to the teachers of the Primary and Grammar schools of some forty districts during May and June. This form of instruction has been continued, though in a less formal way, in all Grammar districts, from the opening of the schools in September last until now. In accordance with an order passed by the School Committee on December 8, arrangements have been made to provide for the normal instruction, twice a month, in the Ling free standing movements, of all teachers of the Primary and Grammar schools not especially excused by the Committee on Physical Training, during the remainder of the present school year.

The question of providing facilities for exercises, involving the use of Swedish gymnastic apparatus, in several school-houses now building, has been brought forward and has occupied a good deal of my attention. It is perfectly feasible, and on many accounts highly desirable, to prepare for the introduction of apparatus gymnastics into all school-houses now building, or which shall be built in the future.

The apparatus can be made and set up at comparatively slight expense in any new school-house; and in many of the buildings now in use, I may add. I am prepared to furnish the plans in accordance with which the necessary Swedish apparatus should be constructed and put in place; and I shall soon be able to make accurate estimates as to the expense which would be involved. I am in favor of recognizing probable contingencies, and preparing for them. I doubt not that the time will come when the introduction of Swedish apparatus gymnastics, into the Grammar and High schools, will be considered indispensable; but that time is not yet. It is of paramount importance that the great body of our class-teachers should become proficient in free gymnastics, first of all. It remains to be seen whether the present staff of this department is sufficient to secure that single end. The problem of introducing apparatus gymnastics, and of otherwise improving the course of physical training in the High schools, is easier of solution, in some respects, owing to their organization on the basis of departmental instruction. A few pieces of Swedish apparatus placed in the hall of the Brighton High School, more than a year ago, are now used, under the guidance of a competent special instructor, in the instruction of girls. The gymnasium belonging to the English High and Latin schools contains ample room for a set of Swedish apparatus, in addition to its present supply of gymnastic machines. This gymnasium is of very little substantial use at present; though, if the change suggested were made and a competent teacher of gymnastics were provided, it might readily be made attractive and serviceable, out of school hours, to the boys of the English High and Latin schools. During school hours it might be used to very considerable advantage in the gymnastic instruction of those boys, of the Latin School, who are debarred from military drill on account of their tender years.

In accordance with the vote of the School Committee, on October 13, authorizing an expenditure, not to exceed \$600, in fitting up a vacant room in the Charlestown High School for gymnastic purposes; I have ordered a model set of Swedish apparatus for that school. The apparatus, which was made to order in Christiana, Norway, is now upon the ocean, and will, it is hoped, be ready for use early in 1892. It is intended that this apparatus shall serve as a model for purposes of construction, and as a guide in determining the proper cost of similar machines, in case the need of procuring Swedish apparatus for other schools shall arise.

Thanks to the liberality and public spirit of Mrs. Mary Hemenway, Dr. Claes J. Euebuske, of the Boston Normal School of Gymnastics, gave forty-six lectures on the theory of Swedish school gymnastics, to the pupils of the Normal School during the school year ending in June, 1891. Under the direction of Mr. Boyden, the sub-master, twelve minutes daily, in each class, were devoted to practice-lessons in gymnastics. By a vote of the School Committee, passed September 16, 1891, Miss Laura S. Plummer, formerly a third assistant in the Emerson School of this city, and a graduate of the Boston Normal School of Gymnastics, was promoted to the position of second assistant in the Normal School, where the instruction in physical training has been put in her charge. The appointment of a competent teacher for the especial purpose of instructing the pupils of the Normal School in the principles and practice of educational gymnastics seems to me a step of the highest consequence. I cannot commend this experiment too warmly, as I believe that the permanent success of the present attempt to make physical training a coördinate and integral factor in the education of our school children will be largely conditioned on the success of this new departure in normal training.

The Cook County Normal School, in Illinois, the State Normal School at West Chester, Pennsylvania, and possibly some other schools of equal rank, have advanced physical training to the dignity of a coördinate branch of instruction within a few years; but Boston is the only American city, so far as I know, that has even attempted such a course of action. Having been invited by the principal of the Normal School to coöperate in shaping and developing this new department of instruction, I shall do all I can to further its success.

Besides continuing the work of normal instruction and of visiting the schools; I propose, during the ensuing year, to elaborate a uniform, minimal course of gymnastic work, according to the Swedish system, for the Primary and Grammar schools; to perfect and institute, if possible, an efficient system of inspecting and rating the class instruction in gymnastics; and to take such other measures to extend and confirm the system of physical training which has been ordained by your Board to be introduced into all the Public Schools of this city, so far as the means placed at my disposal will permit.

It is doubtful if anything short of a general revival of religious asceticism could relegate physical training to the mean and insignificant place assigned to it in American education before the spirit of educational innovation and reform gained sway in the early part of this century. Decade by decade, and at times, year by year, — especially during the last thirty years, - as problems due to the growth of cities have pushed their way to the front, the question of promoting and conserving the bodily health of pupils, in school and college, has assumed larger and more portentous proportions. The intrinsic importance of physical education is sufficiently obvious, and has long been recognized, both implicitly and explicitly, in this as in other communities. Again and again, enthusiastic attempts have been made to combine and correlate bodily training with mental and moral teaching. But so far, no important city or town in

the United States has succeeded in maintaining, for ten consecutive years, a genuine and adequate system of physical education. Of private and endowed institutions, belonging either to the school or college grade, only a very small number have achieved real success in this field. The reasons for this ill-success are not far to seek, and may be traced, speaking broadly, to the readiness of the public, and educators, as well, to espouse heterogeneous and superficial views of physical education, and to adopt hap-hazard and make-shift schemes of procedure, in ignorance or disregard of the plain teachings of science and experience.

At no time, within the memory of men now living, has the interest in problems pertaining to the physical side of education been so general, active, and intelligent as it is to-day. Manifestations of this interest are evident on every hand, not only in Boston and its vicinity, but throughout the country and the civilized world, as well. Ample warrant for this statement is to be found in the number and character of the conferences and discussions which have been held recently, in the reports of governmental commissions, in ministerial ordinances, in the action of municipal boards, and in the schemes and experiments instituted by philanthropists, scientists, and educationists. It should be borne in mind, however, that exhortation, discussion, and experiment in this field are just as little novelties in Boston and New York, as in Berlin and Paris, or London and Stockhelm.

It may help us to understand the present movement for the advancement of physical education, to estimate its force and direction, and to forecast its probable results, if we review the history of the principal movements of a like nature which have had their day in this country, and particularly in our own city.

In the last quarter of the last century schemes and ex-

periments for the reform of popular education were rife in Europe, especially in Germany, where the Philanthropists, who were the precursors of Pestalozzi, Fellenberg, and Freebel, strove to combine physical with intellectual and moral education. The beginnings of popular education in England, due to Raikes, the inventor of the Sunday-school, and to Bell and Lancaster, the apostles of Infant schools and Monitorial system of instruction, also date from this period. The educational movement in Europe made but slight impression upon American thought and endeavor, until after the close of the War of 1812. But the United States shared markedly in the exalted and restless mental activity which characterized the period of twenty or thirty years following the battle of Waterloo. This period was extremely prolific in varied schemes for the amelioration of popular ignorance and misery; and American reformers, especially in New England, became highly susceptible to the influence of foreign example, and developed a well-marked aptitude for "observation and imitation." Physical Education, Manual Training, and what is now termed "University Extension," were all favorite themes, not only with dreamers and theorists, but also with "practical educators" and hard-headed legislators and men of affairs.

Naturally enough, the first comprehensive schemes proposed for the physical education of American youth were of a military character. One of the first emanated from a Massachusetts man, Gen. Henry Knox, who had served in the War of the Revolution. In January, 1790, President Washington transmitted to the first Senate of the United States a report from General Knox, then Secretary of War, recommending the enrolment and military training of all men between the ages of eighteen and sixty. This plan, which failed of adoption, called for the formation of "annual camps of discipline" in each State. In these camps "the advanced corps," composed of "the youth of eighteen,

nineteen, and twenty years of age," was to receive its schooling in the art of war. It was provided that "no amusements should be admitted in camp but those which correspond with war, the swimming of men and horses, running, wrestling, and such other exercises as should render the body flexible and vigorous."

In 1817, in response to a suggestion of President Madison, a report was made to the House of Representatives, on the reorganization of the militia, in which it was recommended "that a corps of military instructors should be formed to attend to the gymnastic and elementary part of instruction in every school in the United States, whilst the more scientific part of the art of war should be communicated by professors of tactics, to be established in all the higher seminaries." This scheme did not receive the sanction of law, either in 1817, or in 1819, when it was again brought forward. The credit for the first considerable successes in combining physical with mental training, in America, should be awarded to the United States Military Academy, at West Point, and to certain schools modelled after it that were nearly coeval with it. Physical training at West Point has a continuous history of nearly, if not quite, seventyfive years; since the administration of Major Sylvanus Thayer, as superintendent, to whose shaping influences the West Point course of instruction owes its most peculiar characteristics, began in 1817. Major Thayer, who had studied the organization and administration of the most prominent military schools of the Continent, seems to have modelled West Point largely after those of France.

In 1818, Capt. Alden Partridge, Major Thayer's immediate predecessor at West Point, resigned from the United States Army, apparently for the purpose of attempting to reform the superior education of the country, whose defects, including an utter neglect of physical education, he vigorously criticised in his well-known "Lecture on Education." In

1820, Capt. Partridge opened his "American Library, Scientific, and Military Academy," at Norwich, Vt. a card published in April, 1825, on the eve of his departure for Middletown, in Connecticut, where he reopened his seminary, Capt. Partridge set forth the results of his labors at Norwich. He claimed that his plan of "connecting mental improvement with a regular course of bodily exercises and the full development of the physical powers, the whole conducted under a military system of discipline," had succeeded beyond his most sanguine expectations. Capt. Partridge was directly concerned in the establishment, or rehabilitation, of no less than six military academies, two of which were opened in 1853, the year of his death. But the public had had enough of warfare and war-like parade, and evinced a marked preference for the utilitarian and humanitarian styles of bodily training, as compared with that of the military sort.

In the years 1825 and 1826, physical education became a matter of almost epidemic interest in New England. Boston in particular was affected by this interest. The outbreak was measurably due to contagion imported from abroad, — by exiles seeking asylum and employment; by scholars returning from foreign universities; by teachers fresh from pilgrimages to the wonder-working shrines of the new educational cult, in Great Britain and on the Continent. Glowing accounts were multiplied, by voice and pen, of the European revival of physical education, which had been brought about by the labors of Guts Muths, Jahn and the Turners, in Germany; of Pestalozzi and Fellenberg, in Switzerland; of Amoros, in France; and of Clias and Vælker, in England. But of Nachtegall's work in Denmark, or of Ling's, in Sweden, little or nothing was said. Local influences, e.g., "the lecture habit," also contributed to intensify the infectitious enthusiasm which these accounts produced.

J. G. Coffin, M.D., of Boston, gave public lectures on Physical Education in the spring of 1825. Dr. Coffin, who had served on the School Committee, evidently had the interests of this subject much at heart, for we find him calling attention to "the great purposes of Physical Education" in his "Discourse on Cold and Warm Bathing," published in 1818, the year in which Joseph Lancaster, the English Quaker, visited Boston in the interest of monitorial instruction. Dr. Coffin recurred at length to the subject in his revised and amended edition of "Buchan's Domestic Medicine" (Boston, 1825), as well as in the lectures already alluded to. In 1826 Dr. Coffin became proprietor and editor of "The Boston Medical Intelligencer, devoted to the Cause of Physical Education and to the Means of Preventing and Curing Disease." In 1823 the Boston Monitorial School was established in Washington court, for girls. Mr. William B. Fowle was its instructor. In a letter to the editor of the "Medical Intelligencer" dated October, 1826, Mr. Fowle gives an account of his "humble efforts" to introduce gymnastics into the Monitorial School. "My attempt takes date," he says, "from the delivery of one of your lectures on Physical Education, early in the spring of 1825. I had long before noticed the feeble health of many of my pupils, and encouraged them to take more exercise, but they wanted means and example, and little or nothing was effected. The very day after the delivery of your first lecture, I procured two or three bars, and as many pulleys, and after I had explained the manner of using them to the best advantage, my pupils needed no further encouragement to action. My chief difficulty was in the selection of proper exercises for females. You know the prevailing notions of female delicacy and propriety are at variance with every attempt to render females less feeble and delicate. . . I have finally succeeded in contriving apparatus and exercises, enough to keep all employed in play hours. Besides the ordinary exercises of raising the arms and feet and extending them in various directions, we have various methods of hanging and swinging by the arms, tilting, raising weights, jumping forward marching, running, enduring, etc., etc. I have no longer any anxiety about procuring suitable exercises, or in sufficient variety, for my pupils; and I believe the few parents whose more prim education led them to shudder at my innovation have surrendered their prejudices. . . . I hope the day is not far distant when gymnasiums for women will be as common as churches in Boston, and when our young men, in selecting the mothers for their future offspring, will make it one of the conditions of the covenant that they be healthy, strong, capable of enduring fatigue, encountering danger, and helping themselves." In commenting on Mr. Fowle's letter, Dr. Coffin remarks: "We value this letter mainly, in the first place, because it is the first account we have seen of gymnastics having been successfully practised in any school for girls in any part of the United States; and secondly, because it is the first direct evidence we have had that the feeble, though persevering, efforts we have from time to time made to bring into notice and favor the long missing though fundamental branch of education, have produced any good effect."

It is noteworthy that Dr. Coffin makes no mention of the fact that, at the time of his writing, gymnastic instruction formed a part of the curriculum in Mr. Gideon F. Thayer's private school for boys on Harvard place. Possibly, Mr. Thayer's adoption of gymnastics was a self-prompted action. The exact date of Mr. Thayer's adoption of gymnastics is uncertain. It must have been prior to June 15, 1826, as is shown by a letter written on that date to the editor of the "American Journal of Education," by Mr. Thayer, for the purpose of describing the peculiarities of his school in Harvard place, out of which the well-known Chauncy Hall School developed later. The following is taken from Mr.

Thayer's letter: "One teacher takes a division of a class at one end of the hall, and another one at the other end; while the remaining boys form a line in the aisle, and taking such apparatus as may be designated, move out of school in company for gymnastic exercises. When the weather is suitable they go, accompanied by the principal, to the Common, where they engage for about fifteen minutes in running, hopping, jumping, — with poles and without, leap-frog, drawing, or pulling by classes at the opposite ends of a rope, etc., and returning to the school, one of the teachers takes out such of the remaining boys as have been found correct in their lessons, for similar physical exercises in the open air. When the weather is not suitable for this, the boys go into the yard about the school, a class at a time, and take exercise by themselves as well as the space will allow. We have a plank placed edgewise, and raised about eighteen inches from the ground, on which we require them to walk, to strengthen their legs and ankles and gain the power of preserving equilibrium in narrow paths, etc. These sports are much enjoyed by the boys, and are granted to none who have been found deficient in lessons or deportment during the morning. They are to be extended by the erection of such additional apparatus as the limits about the establishment will permit. Besides our daily exercises, the principal, sometimes accompanied by an assistant, occasionally invites boys to meet him early in the morning on the Common or on the mall, where they engage in their usual sports, or walking. We have been several times to South Boston during the present season. We sometimes exercise them, too, in school hours, in marching with reference to the carriage of the body, turning out the toes, and such other matters in connection as boys are most apt to fail in."

There is good reason to believe that the physical education installed at West Point in 1817, and at the Norwich Seminary in 1820, was of the narrow and technical military type, and consisted chiefly of infantry drill and marching.

It is a significant fact that the Board of Visitors on the Military Academy at West Point, of which Mr. George Ticknor, of Boston, was secretary, state in their report, dated June 24, 1826, that they "are persuaded that a Riding-School and Gymnastic exercises are much wanted here; and they recommend that a building be erected fitted for these purposes, for a Fencing-School and for Military Drills." One reason given for this recommendation is, that "the drill during the summer months is sufficient to give the cadets healthful exercise, and no more; but during the winter this resource fails, and their spirits and activity fail with it." It is evident, too, that the crude though sanguine experiments of Messrs. Fowle and Thayer did not lead to very considerable or lasting results, inasmuch as the former was induced, by the inexpugnable prejudices of his patrons, to substitute dancing for gymnastics, and the latter did not find it worth his while to provide a gymnasium for the boys of the Chauncy Hall School.

The most influential and deservedly famous of the school gymnasia of this period was that established in 1825, by Messrs. J. G. Cogswell and George Bancroft, formerly members of the faculty of Harvard College, then the proprietors of the Round Hill School, at Northampton, Mass. It was in reality a Turn-plutz, or gymnastic-ground, planned, fitted, and managed in accordance with the principles and practice of the gymnastic system then, as now, known as German turning. Contemporary notices make it clear that this gymnasium was opened as early as the spring of 1825, in which year the name of "Charles Beck, Instructor in Latin and Gymnastics" appears at the head of the list of assistants at Round Hill. The whole school, then comprising one hundred and twelve boys, was divided into gymnastic classes, and each class received instruction from Dr. Beck, an hour at a time, three times a week. Dr. Beck had received his gymnastic training under Jahn in Germany. The venerable Dr. George C. Shattuck, of this city, who was a pupil at Round Hill, informs me that, "at the same time, there were a dozen riding-horses, and classes for riding three times a week. Gardens were assigned the boys in which they raised plants and vegetables. A piece of land was set apart for building huts. Base-ball, hockey, and foot-ball were the games." The Round Hill School introduced many features that were novelties in the liberal education of American boys. Several of its novel features, however, were simply direct imitations of procedures that one or the other of its projectors had met with in visiting European schools, as, for instance, those of Fellenberg, at Hofwyl, and of Pestalozzi, at Yverdun. But I know of no reason to dispute the claim put forth, in 1820, by Messrs. Cogswell and Bancroft, that they "were the first in the new continent to connect gymnastics with a purely literary establishment." Physical training continued to be a marked feature of the Round Hill School for several years.

It would appear that the first public gymnasium of any note, in the United States, was the Boston Gymnasium. The "Medical Intelligencer," for Oct. 3, 1826, has the following: "The Boston Gymnasium was opened on Thursday last [i.e., September 28], at six o'clock in the morning, for exercise and instruction. The principal instructor is Charles Follen, LL.D., a pupil of the celebrated Jahn. The assistant instructor is George F. Turner, A.B., of Virginia, recently a distinguished pupil in the gymnasium at Cambridge." The fullest connected account that I have seen of the movement to establish the Boston Gymnasium is that given by Mr. Granville B. Putnam, master of the Franklin School of this city, in the "New England Magazine" for September, 1890. From that article, and from various other sources of information, I have compiled what follows: On March 13, 1826, a petition of William Sullivan, and others, asking for the "use of a piece of land not exceeding one acre in extent, at the junction of Boylston, Pleasant,

and Charles streets, for two years from the first day of May next, for the purpose of establishing a school for gymnastic instruction and exercise," was favorably received by the Board of Aldermen of Boston. On April 17, the Aldermen, and the Common Council in concurrence, granted the petition on the ground that the contemplated institution was to be "of a public nature and for the use of all citizens." "Gentlemen of the first respectability" were enlisted in the cause, as is evidenced by the fact that Daniel Webster wrote a letter favoring the scheme, and by the names of the committee charged to solicit contributions and apply them to the establishment of a "gymnastic school." The committee consisted of John C. Warren, George Ticknor, John G. Coffin, John S. Foster, Thomas Motley, Josiah Quincy, and John B. Davis. The public meeting, which resulted in the appointment of this committee, was held at the Exchange Coffee House, June 15, 1826. A full report of the meeting, signed by its secretary, Charles P. Curtis, appears in the "Boston Daily Advertiser" of June 19. The "Advertiser," of July 24, notes that only thirty shares at \$20 of the 250 offered by the committee had thus far been taken. The difficulty of securing the amount of money desired may serve to account for the fact that the Boston Gymnasium was opened out of doors, after the German fashion, in the Washington Gardens, on the northern corner of Tremont and West street, instead of on the land whose use had been granted by the city government. The gymnasium opened with a distinguished list of about two hundred pupils. The patrons increased to four hundred in number within the first year, and dwindled to four in the course of the second year, it is said. Both Dr. Follen, and Dr. Lieber, who succeeded him in July, 1827, were trained gymnasts, in the school of Jahn, and had left Germany for political reasons. Lieber came to America, from London, for the express purpose of taking charge of the Boston Gymnasium, and of

establishing a swimming-school. He was warmly recommended by Jahn himself, who declined the overtures made to him to assume direction of the Boston Gymnasium. "But," as has been said by another, "no talent could keep the gymnasium alive after the novelty had ceased, and some of the gymnasts had been caricatured in the print-shops."

The colleges and secondary private schools, of New England, were actively stimulated by the example of Round Hill and the Boston Gymnasium, and a furore for gymnastics was the result. The following extract, from the same issue of the "Medical Intelligencer" which is cited above, may serve to show how optimistic were the views current at this time, both in England and in the then scarcely weaned daughter country:

"A gentleman writes from London that gymnastics are now overspreading the whole country, for women as well as men, and little children, as well as for both. I should remark here that vaulting the wooden horse and exercising on the triangle are getting to be special favorites among the active and graceful exercises of the system. Incredible things are done every day on both, by men who were much too stately and dyspeptic a few months ago to lift their feet with a jump. They are cured now,—cured of dyspepsia, and cured of a worse fault, their absurd carriage. They sleep well, eat well, and look well, and, what is more, they behave well, since they are made happy by bodily exercise."

Harvard College started the first American college gymnasium in one of its dining-halls, in March, 1826, and later in the same season a variety of gymnastic appliances were put up in the college playground, known as the Delta. Dr. Follen, then engaged in teaching German in the college, was the instructor and leader in gymnastics. Indeed, it was largely owing to Dr. Follen's exertions, backed by an appeal from the medical professors, that the establishment of

the gymnasium was due. The students' interest in gymnastic exercises was fervid for one or two years, and then flickered out.

In September of the same year the corporation of Yale College voted to appropriate \$300 for the "clearing and preparing of the grounds (on the college green) for a gymnasium, and for the erection of apparatus for gymnastic exercises."

In May, 1827, Williams College appropriated \$100 to the procuring and erection of apparatus necessary "to the practise of the gymnastic exercises," — on the recommendation, as it would appear, of "Tutor Mark Hopkins," who had been sent on a mission to Round Hill to investigate the construction and working of its gymnasium.

A gymnasium was opened June 11, 1827, at Brown University, and we read that "the exercises were countenanced, and consequently enlivened, by the presence of the president, professors, and tutors of the university."

The "Gymnasium in the Grove" at Amherst College, vestiges of which existed so late as 1857, was probably erected in 1827 or 1828.

Physical exercises formed a feature, too, of the New York High School, which was established, for boys, in New York City in 1825 by Dr. John Griscom, whose studies of European schools and philanthropy had been embodied in two stout volumes entitled "A Year in Europe." It became one of the most famous and flourishing monitorial schools in the country. Lancasterian, Fellenbergean, and Pestalozzian principles and methods were boldly combined in its make-up and management. For some years the Round Hill School and the New York High School constituted a sort of stelladuplex in the educational firmament, and served to fix the gaze and fire the emulation of a host of aspiring and enterprising pedagogical adventurers. The annals of the time we are considering are too meagre to furnish a full and accurate

statement of the schools that were established to carry out the ideas suggested by the two institutions mentioned above. The schools named in the following list were established in the period 1825-8. Many of them avowedly strove to follow the example of Round Hill or the New York High School; some accepted both as models; and all of them affected to pay special attention to gymnastics and to "physical education." The list, though very incomplete, may suffice as an indication of the activity which then prevailed in erecting gymnasia and professing proficiency in conducting physical education. It includes: the Mt. Pleasant Classical Institution, Amherst, Mass.; Brookline (Mass.) Gymnasium; New Haven Gymnasium, Conn.; Berkshire High School, Pittsfield, Mass.; Bridgeport High School, Conn.; High School for Girls, Buffalo, N.Y.; Walnut Grove School, Troy, N.Y.; Livingston County High School, Geneseo, N.Y.; Classical and Scientific Seminary, Ballston, N.Y.; Mt. Hope Literary and Scientific Institution, Baltimore, Md.; and the Primary School, No. 1, Cheshire, Conn. It does not appear that physical training, in any of the schools just named, amounted to anything more than an ephemeral novelty — a faint and superficial imitation of the German or Swiss gymnastics, or of the English version of the same.

A striking instance of the vague and encyclopædic meaning attributed to the term "physical education" is found in the "Outline of Instruction as conducted in the Cheshire (Conn.) Primary School No. 1, winter term, 1826-7," by A. B. Alcott, who migrated to Boston a year or so later and became for a time superintendent of the Infant School in Salem street, Boston. This gentleman was well known later as A. Bronson Alcott. The "Outline," which covers seven and one-half printed pages, octavo, embraces a great variety of topics which are grouped under the heads of "moral, physical, and intellectual education and instruments of education."

The topics under "Physical Education" occupy nearly a page, and relate to exercises for the eye, ear, hand, and voice; to play-games and to exercises. "Play-games" include, balancing, jumping, hopping, swinging, running. "Exercises" include: "exercises in the interior of the school-room, in which all engage simultaneously.

Exercises in Evening Reading Schools.

Amusements at the instructor's room.

Practical ethics, furnishing exercise for the physical powers daily among companions, etc."

Of the "Outline," Mr. Alcott says, "Its scope, it will be perceived, is limited and its arrangement crude; perhaps in some instances fanciful and arbitrary." Mr. Alcott's characterization of his "Outline" might also be applied to the following caption of an article which appears in the "Boston Medical Intelligencer" for March 27, 1827: "Physical education. — Manner in which a new-born infant should be washed and dressed. — Wooden bathing-vessel. — Cushion stuffed with chopped straw. — No pins in the clothes. — First shifts."

The time was evidently not ripe for a genuine and sustained effort for the advancement of physical education in New England. What night have been the result if Drs. Beck, Follen, and Lieber had continued their crusade, instead of quitting the field, it is vain to surmise. Even they were governed more by theoretical and æsthetical notions of human perfectibility than by scientific knowledge of the laws of bodily health and development. How short-lived was the interest evoked by Jahn's pupils in gymnastics, for educational purposes, may be seen from the following extract from an address "On the Importance of Physical Education," delivered in Boston in 1830, by Dr. John Collins Warren (formerly President of the Boston Gymnasium) before the American Institute of Instruction at its first meeting. "The establishment of gymnasia throughout the country

promised, at one period, the opening of a new era in physical education. The exercises were pursued with ardor, so long as their novelty lasted; but owing to not understanding their importance, on some defect in the institutions which adopted them, they have gradually been neglected and forgotten, at least in our vicinity. The benefits which resulted from these institutions, within my personal knowledge and experience, far transcended the most sanguine expectations. . . The diversions of the gymnasium should constitute a regular part of the duties of all our colleges and seminaries of learning."

One searches in vain for any evidence that the School Committee, or the Masters of the Public Schools of Boston, took any interest or part in the gymnastic movement of Mr. Thomas Cushing, formerly Principal of the Chauncy Hall School, in reply to my inquiries, obligingly writes me that at about the same time that Mr. Thayer " put up some gymnastic apparatus on a vacant strip of land opening on School street, and connected with the yard of his school in Harvard place, similar apparatus was erected in the yard of the old Latin School in School street, where I also exercised. I cannot say whether it was the teachers or the city who put up the simple apparatus. The boys used it pretty much as they chose, and I do not think it lasted more than a couple of years. No teacher gave direct instruction, but I remember seeing Mr. Samuel Parker, an usher and sub-master from 1824 to 1828, take off his coat sometimes and show us how to do things on the bars, etc." Mr. Cushing's statement with regard to the Latin School gymnasium is corroborated by Rev. Edward Everett Hale, who has kindly writen me as follows: "When I went to the Latin School in School street, in 1831, there was a schoolvard in which the boys of the lower story could play. this yard was still left a wooden horse for jumping over, which was a relic of the gymnasium which had been made

there; the boys had destroyed all the rest, as the Cambridge boys had destroyed everything in the Delta before I went there, excepting the holes in which the tan had been placed."

It would appear that the Common Council gave more thought to the physique of the youth committed to their charge than did the then School Committee, if we may judge from a passage contained in a report made in February, 1829, by a committee of the Common Council on the Government and Discipline in the House of Reformation for Juvenile Offenders, at South Boston. The passage reads, "They (the boys) are allowed two and one-fourth hours each day for recreation, viz., three-quarters of an hour in the morning, at noon, and in the evening. These hours are mostly spent in gymnastic exercises, at ball, in walking, etc."

In the interval between 1830 and 1860 there was no general or widespread revival of interest in school or college gymnastics; and athletic sports were not recognized, either as an elective or compulsory branch of education. But what was loosely termed "physical education" received marked attention from writers and talkers on education. A rather imposing list might be made of addresses, articles, and books, purporting to relate, in whole or in part, to physical education, that were published in the course of the thirty years under review. It would contain a few titles on calisthenics and gymnastics, but the burden of utterance would be found to relate to physiology, phrenology, and the "religious observance," to quote from Horace Mann, "of all those sanitary regulations with which modern science has blessed the world."

Physical education, in the sense of personal hygiene and school sanitation, received a good deal of attention from the School Committee of Boston during this period. For instance, it is provided in Sect. 13, Chap. II., of the Rules and Regulations of the School Committee for 1829, that, "during the season for fires, the masters may call on the

boys of the first and second classes [in the English High, the Grammar, and Writing schools] to sweep and make the fires, and during the other part of the year they may call on the boys of the third and fourth classes to sweep." In the section following, the special attention of the instructors is "required to the ventilation and temperature of the school-rooms, and the cleanliness and comfort of the scholars."

In February, 1833, Mr. Samuel A. Eliot, as chairman of a special committee "to examine the structure and location of the several school-houses," made a report to the School Committee recommending the introduction of ventilators into all Grammar school-rooms; the provision of one or more warm-air furnaces, and a thermometer for each room; and the substitution of level for inclined floors, together with improved seating arrangements for teachers and pupils. The report, which is couched in vigorous and unmistakable terms, urges that: "It is the duty of parents, and of those who act for them, to take care that the schoolroom, to which their children are to be confined for several hours each day, be a place which shall expose them to no disease or unnecessary suffering; that it be a place in which not merely the growth of their minds be promoted, but in which the growth of their bodies shall not be checked; where they may acquire the use of their intellectual faculties without having their physical organization distorted, or their vital powers debilitated by a constrained position or an impure atmosphere." The report declares that "it is strictly true that more care is taken of the convicts in our penitentiary, and of the ventilation of their cells, than is bestowed upon the health of the children we send to our schools, or upon the rooms in which they are assembled." In 1839, when Mr. Eliot was mayor of the City, he returned to these questions in an address before the School Board, and in addition to the recommendations above noted, urged that less mental work be exacted of the pupils in the schools. It is fair to surmise that the following new rule, which is Sect. 11, Chapter I., of the Rules and Regulations for 1839, may have owed its passage to Mayor Eliot's zealous demands for pure air. "It shall be the duty of the masters to give vigilant attention to the ventilation and temperature of the school-room. A regular system of ventilation shall be practised, as well in winter as in summer, by which the air in the rooms shall be effectually changed at the end of each school-time, before the house shall be closed." This is the substance, and to some extent the phraseology, of Sect. 223 of the Regulations of the School Committee at present in force.

The Primary School Committee of Boston, on May 7, 1833, appointed a committee of eleven "to consider whether any and what improvements in regard to physical education, means of instruction, or books of study, can be made in the Primary schools." In accordance with the recommendation of this committee in its report of Nov. 5, 1833, a new rule was adopted, to the effect that "it shall be the duty of the instructors to attend to the physical comfort and education of the pupils under their care; and to this end the ordinary duties and exercises of the school shall be suspended for a portion of time, not exceeding fifteen minutes, each part of the day. This time shall be taken together or divided, at the discretion of the teacher, and occupied in conformity with the state of the weather, the season of the year, and the situation and convenience of the school-room; and in such manner as each instructor shall judge best adapted to relieve weariness, strengthen the physical constitution, excite love of order, and associate with the school ideas of cheerfulness, as well as of improvement." This rule, originally Rule 10, Chapter V., of Rules and Regulations of the Primary School Committee, 1833, has held over, in its main requirements, till the present day, and is the only

specific ordinance now in force relative to "the physical culture" of Primary school children. In the rules of the Primary School Committee for 1838, the intention of this rule is set forth in a footnote, from which we learn that the time taken was "to be spent when practicable in recreation and exercise in the open air, under the direction of the instructor or elder pupils, . . . otherwise within the school, . . . with some general and regular exercises; such as rising up and sitting down by divisions, classes, and the whole together, marching and countermarching, and simultaneous motions of the various limbs, combined and varied in accordance with the best judgment of each instructor." When the Primary School Committee was abolished in 1855, the General School Committee adopted the rule above mentioned as one of its regulations of the Primary Schools. It has been condensed and recast in some respects, but is still recognizable as Sect. 250 (p. 44) of the Regulations of the School Committee, last published in 1888.

The next most ancient rule, relating to physical exercise, is found under the head of "General Regulations of the Public Schools" (p. 40, edition of 1888, cited above), Sect. 224. It reads: "The teachers shall so arrange the daily exercises in their classes that every scholar shall have, each forenoon and afternoon, some kind of physical exercise for not less than five minutes." As originally enacted (see Rules, etc., 1853, Chapter I., Sect. 17) it reads: "The masters, ushers, and teachers in the Grammar and Writing schools shall so arrange the daily course of exercises in their respective classes that every scholar shall have daily, in the forenoon and afternoon, some kind of physical or gymnastic exercise; this exercise to take place as nearly as practicable midway between the commencement of the session and recess, and between recess and the end of the session." I cannot account for the passage of this rule, except on the

supposition that it was passed in deference to views expressed by Mr. Nathan Bishop, first superintendent of the schools in Boston, in his first and second reports, which were made, respectively, in 1851 and 1852. Mr. Bishop's views are more fully expressed in his second report: "Every plan of classification," he says, "in which the children have not frequent opportunities for practising physical exercises suited to their tender ages, must be essentially defective. A well-arranged series of physical exercises, providing frequent and gentle motions for the younger children, and requiring less frequent, but more vigorous, action, as the age of the pupil advances, would call the muscles of the chest and limbs into healthful play, in accordance with the natural laws of their growth, which can never be violated with impunity. If some of our most scientific and practical physiologists would prepare a manual for the use of parents and teachers, containing such a series of physical exercises as would tend to promote strength of body and gracefulness of motion, they would confer a great benefit upon the community." Mr. Bishop also declares that "all the younger children need provision for some gentle exercise as often as once in every half hour, such as rising, walking, marching, accompanied with such motions of the arms as would tend to give fulness and erectness to the chest." There is reason for thinking that, as early as 1842, Mr. Bishop had been instrumental in promoting "gentle exercises," such as he describes, in the public schools of Providence, R.I., where he was then Superintendent of Schools. No "scientific and practical physiologist" in America has ever written a "Manual of Physical Exercises," so far as I know.

Miss Catherine E. Beecher, who was a precursor of Dio Lewis, as an advocate and inventor of light gymnastics, published "A Manual of Physiology and Calisthenics for Schools and Families" in 1856. Her "Course of Callisthenics for Young Ladies," published in 1832, at Hartford, Conn., is probably the first work by a native American in this field. The credit of writing the first manual of gymnastic exercises, for use in any of the Boston schools, belongs to Mr. S. W. Mason, of the present Board of Supervisors, who was master of the Eliot School in 1862, when his "Manual of Gymnastic Exercises" was published. It is worthy of note that Miss Beecher, who had previously invented "a course of calisthenic exercises, accompanied by music," professes in 1856, in the preface of her work on physiology and calisthenics, to be a disciple of Ling. She claims that her system "is arranged on scientific principles, with the design of exercising all the muscles, and of exercising them equably and harmoniously. It embraces most of what is to be found in the French and English works that exhibit the system of Ling, the celebrated Swedish professor." It must be said, that there is extremely little in Miss Beecher's book to show that she, or the writers followed by her, had grasped the principles of the Ling system, or were practically familiar with its distinctive methods.

The title of Miss Beecher's work, "Physiology and Calisthenics," is highly significant as a reminder of the agitation, then somewhat past its culmination, on behalf of the teaching of physiology and the laws of health. The origin and course of this agitation constitute one of the most curious and characteristic chapters in the educational history of Massachusetts and New England. Boston was an influential centre in this movement, whose beginnings possibly may be found in public lectures delivered by Drs. Coffin, Bradford, and Ware in 1825 and 1826. The lectures given by Dr. Spürzheim, the learned German phrenologist, in 1832, in Boston and Cambridge; the publication in 1829 of the Boston edition of George Combe's "Constitution of Man;" the lectures which Combe himself gave in Boston on Phrenology and Education in 1838; the publication of "Out-

lines of Human Physiology," by G. Hayward, M.D., of Boston," in 1834; Harper & Brothers' "republication," in 1834, of Dr. Andrew Combe's "Principles of Physiology applied to the Preservation of Health, and to the Improvement of Physical and Mental Education;" the books and articles of Dr. W. A. Alcott, and the writings and addresses of Hon. Horace Mann in this field, — all contributed to widen and deepen popular interest in physiological doctrines and their bearing upon education.

Mr. Mann's Sixth Annual Report, as Secretary of the Massachusetts Board of Education, was published in January, 1843. More than two-thirds of its 160 pages are devoted to the consideration of physiology and to advocacy of its claims to a place in the public school curriculum. Mr. Mann succeeded in securing an indorsement of his views from several leading physicians, of whom Dr. James Jackson was the most eminent. Three new text-books in physiology were published in Boston in the period 1844-7. In 1850 the Massachusetts Legislature passed a law authorizing school committees throughout the Commonwealth "to make physiology and hygiene a compulsory study in all the public schools," and requiring that all school teachers "be examined in their knowledge of the elementary principles of physiology and hygiene, and their ability to give instruction in the same." There is ample and indubitable evidence that Mr. Mann's zeal and enthusiasm, for the dissemination of information regarding the structure and functions of the body, grew directly out of his acquaintance with George Combe and his writings. Mr. Mann, like most of the educational writers of his time and country, gave expression to the most elevated and eulogistic sentiments regarding "physical education," but usually employed the term in a very vague and comprehensive sense. So far as I can learn, Mr. Mann never went so far as to propose any working scheme of school gymnastics. Yet he was not altogether

unfamiliar with gymnastic procedures, as is shown by his lively and laudatory mention in the "Common School Journal" for June 10, 1845, of two Boston gymnasia, then in vogue, but now forgotten. These were the "excellent gymnastic school kept by Mrs. Hawley, for young misses," and the then recently opened and elaborately furnished gymnasium of Dr. David Thayer, in Boylston Hall, Washington street. While the agitation on behalf of "the laws of life and health" was not signalized by any well defined attempt to incorporate gymnastic or calisthenic training in the system of public instruction, it did serve to perpetuate certain well marked tendencies of the period 1825–30, and to prepare the way for the "Gymnastic Revival" of 1860.

Diocletian Lewis, commonly called Dr. Dio Lewis, is popularly considered a sort of gymnastical Peter the Hermit, to whose preachings and teachings the Crusade of the New Gymnastics was chiefly due. Most certainly he was an extremely active and fluent personage, and exerted not a little influence in various directions; but his main service, as regards gymnastics, lay in the skill with which he raked together the embers and fanned the flames that had been kindled by others. We have abundant evidence that there was a growing interest in gymnastic and athletic forms of exercise in the latter half of the decade ending in 1860. Such evidence is to be found in the efforts to secure funds for the erection of school and college gymnasia; in the increased addiction of collegians and others to rowing and ball matches; in the instant popularity achieved by the Tom Brown books; in the interest excited by the lectures and exhibitions of Dr. G. B. Windship, whose public career as an exponent of heavy lifting began in Boston, in 1859; and in the prominence given to topics relating to physical education in general, and school gymnastics in particular, by speakers at teachers' conventions and institutes, by the conductors of educational journals, and by public school officials.

Symptoms of the new awakening among Massachusetts educationists became pronounced as early as the year 1857. In his report for 1857, the Secretary of the State Board of Education, Mr. George S. Boutwell, declared: "As a community we have no physical training whatever; and there is great danger, as the population of the State is aggregated in villages and cities, and an increasing proportion of the people are employed in sedentary pursuits, that a pernicious change will be wrought in the character of the Commonwealth. Many modern school-houses are wisely furnished with sufficient playgrounds, and provision has been made for gymnastic exercises. Such arrangements seem to be necessary in the cities." Appended to Secretary Boutwell's report are extracts from nearly one hundred school committee reports, which extracts are printed under the caption of "Physical and Moral Education." Most of the extracts are disquisitions on morals and manners. Seven of them, however, treat more or less directly of physical education. Of these, the extract from the report of the school committee of Easton is by far the fullest and best, and is especially noteworthy, because it contains a circumstantial and appreciative account, written by an American observer, of the Swedish school gymnastics.

In his report for 1858, Secretary Boutwell elaborates his views relating to physical training, which he takes to mean gymnastics. He goes so far as to favor the shortening of the school-day, particularly in Primary schools, and suggests "the establishment in cities and large towns of public gymnasiums, where teachers answering in moral qualifications to the requisitions of the laws, shall be employed, and where each child for one, two, or three years shall receive discreet and careful but vigorous physical training. After a few years thus passed in corresponding and healthful development of the mind and body, the pupil is prepared for admission to the advanced schools, where he can submit,

with perfect safety, to greater mental requirements even than are now made."

Secretary Boutwell's report is dated December 31, 1858. It is interesting to find Superintendent Philbrick, in his Seventh Quarterly Report, on the 7th day of the same month, calling the attention of the School Committee of Boston to the claims of physical education in the following words: "We have educated the intellect. But it is now beginning to be seen that body with mind is necessary to produce intellect; . . . while intellect is in training, the conscience and the body must not be neglected. . . . The next step is to provide the requisite means for increasing the vigor of the body and the development of the moral nature, so far as is consistent with the proper objects of a system of public instruction." As these words were penned nearly two years before Dio Lewis secured the ear of the Boston public, it would be a violent assumption to attribute Superintendent Philbrick's views on physical education to the teachings of the apostle of the new gymnastics.

As further evidence of the general awakening among teachers to the claims of physical education, the following citations from the proceedings of the meetings of the National Teachers' Association at Buffalo, and the American Institute of Instruction at Boston, in the month of August, 1860, may suffice. At Buffalo, the following resolutions were debated on August 8: "Resolved, That this Association recognizes a thorough and judicious system of physical culture, as the only basis for the full and complete development of our mental and moral faculties; and that any system of instruction which does not actively recognize the importance of physical education fails in accomplishing the great end of education. Resolved, That we urge upon school committees and others in charge of public instruction the propriety of introducing into all our schools, by positive enactment, the careful observance on the part of teachers of a system of

school-room gymnastics adapted to the wants of all grades of pupils." At Boston, the question that called forth the most interest and discussion was, "Is it expedient to make calisthenics and gymnastics a part of school-teaching?" The discussion occupied the morning sessions of the Institute, at Tremont Temple, on August 21 and 22. Dio Lewis, who had taken up his residence at West Newton a few months before, was called on as "one who had given special attention to the subject." He made some characteristic remarks, which led to the appointment of a committee to visit his newly established gymnasium in Essex street. August 22 the committee made a complimentary report; and an exhibition illustrative of the Lewis gymnastics, under Dio Lewis' direction, was given before the Institute. exercises consisted of club-swinging and class exercises with bean-bags and with wands, together with a variety of free movements. A number of gentlemen from the audience took part in the exercises, and "there was much merriment among the actors as well as amusement for the audience." A resolution pronouncing the Lewis gymnastics "eminently worthy of general introduction into all our schools, and into general use," was unanimously passed. The fact that Dr. Wellington, of this city, balled attention to the Ling gymnastics, in the discussion which followed the passage of the resolution, has been noted by Dr. W. A. Mowry, in his interesting report, as chairman of the Committee on Physical Training, June, 1890. Dr. Wellington expressed his preference for "slow, steady movements," as used by Ling to the more rapid movements presented by Lewis. He considered it "of great importance that teachers should understand the leading features of this [i.e. the Ling] system. However, he would indorse the exercises employed by Dr. Lewis as the best he had ever seen for introduction into common schools."

As was noted above, the Gymnastic Revival of 1860 was not a thing apart but grew out of the crusade for popu-

larizing physiology and hygiene, if, indeed, it be not better described as a phase or continuation of that crusade. It was wholly natural that Dio Lewis should figure in both movements. He was by nature an enthusiast, a radical, and a free lance. He was born and bred at a time when advocacy of the doctrines of temperance, anti-slavery, phrenology, physiology, and of educational reform savored more or less of ultra-liberalism, or even "free-thinking." Before his first public appearance in Boston, at the Tremont Temple, where he may be said to have stormed the key to the situation, by his capture of the American Institute of Instruction: Dio Lewis had travelled extensively, for some years, in the Southern and Western States, as a week-day lecturer on Physiology and Hygiene, and as a Sunday orator on Temperance. He had given some attention to physical education, withal, and, being well versed in the arts of the platform, was quick and apt in taking advantage of the growing interest in gymnastics. He was unconventional, sympathetic, plausible, oracular, and self-sufficient, and the time was ripe for a gymnasiarch of that sort. The doctrines and methods of the Lewis gymnastics, which were novelties and seemed original to most of his followers and imitators, spread rapidly over the whole country, and, if we may credit certain eulogists of the system, even into "Europe, Asia, and Africa." His skill in securing the aid and backing of educationists and notabilities contributed materially towards making Dio Lewis the most conspicuous luminary for a time, in the American gymnastical firmament. He was in great demand as a lecturer before normal schools, teachers' associations and institutes, and Lyceum audiences; and his contributions to the "Massachusetts Teacher," "Barnard's Journal of Education," and the "Atlantic Monthly," etc., were eagerly read and favorably received. He was medicalpractitioner, lecturer, editor, gymnasium-manager, teacher,

hotel-proprietor, and preacher by turns; besides which he served out a part of one term in the Boston School Committee, to whose deliberations he appears to have contributed nothing of moment. In short Dio Lewis was a revivalist and agitator, and not a scientist in any proper sense. His originality has been much over-rated, — very few of his inventions, either in the line of apparatus or of methods of teaching, being really new. In his "New Gymnastics for Men, Women, and Children, Boston, 1862," which reached its eighth edition in two years, and in his "Weak Lungs and How to Make them Strong, Boston, 1863," he borrowed lavishly from German sources.

Of "the Boston Normal Institute for Physical Education," which he established in 1861, Dio Lewis declared: "this Institution is presumed to be the first ever established to educate guides in Physical Culture." This statement was indeed presumptuous, inasmuch as the Prussian government had maintained a Normal School of Gymnastics, in Berlin, since 1851; the Royal Normal School, for Teachers of Gymnastics, in Dresden, had existed since 1850; and the Royal Central Gymnastic Institute, of Stockholm, dated from 1814. The Boston Normal Institute had two terms a year, of ten weeks each; and in the seven years of its continuance, 421 persons were graduated from it. valedictorian of its first class, Miss Abby W. May, became a distinguished member of the School Committee of Boston in later years. The establishment of the Boston Normal Institute for Physical Education was a really new departure —in America — (unless perchance the Turnlehrer Seminar of the North American Turnerband antedated it), and constituted, perhaps, the most considerable and solid of Dio Lewis's contributions to the cause of physical education. He is also deserving of praise and credit for convincing the public of the utility of light gymnastics, and for his influential aid in popularizing gymnastics for school children

of both sexes. It is probable that the "New Gymnastics" would have developed more fully and satisfactorily but for the outbreak of the War of the Rebellion, and the consequent predilection of boys and school-managers for military drill as a school exercise.

On September 11, 1860, or less than a month after the American Institute of Instruction had pronounced the Lewis gymnastics "eminently worthy of introduction into all our schools," Superintendent Philbrick presented his First Semi-annual Report to the School Committee. The main topic of the report was the want of physical training in the Boston schools, and the proper remedy for that want. "Under the present conditions of city life at home and at school," he said, "a child stands a poor chance to enter upon the career of life having a good physical system, a body healthy, strong, well-formed, and of good size. . . . The practical question for us is, what ought to be done in our schools to arrest physical deterioration? . . . The principal remedy which I would suggest is the introduction into all grades of our schools, of a thorough system of physical training, as a part of the school culture. Let a part of the school time of each day be devoted to the practice of calisthenic and gymnastic exercises, in which every pupil shall be required to participate. . . . The exercises which I would recommend, can be practised without costly apparatus, and without a room set apart for the purpose; they contain all that either sex needs for the perfect development of the body, and are adapted to mixed schools, so that both sexes can perform them together." Superintendent Philbrick was Editor of the "Massachusetts Teacher" for November, 1860, and gave the first place, in the number for that date, to an article by Dio Lewis on "Physical Culture." The article contains the following passage: "In Boston, every school-house should at once be provided with a fine playground, and a complete

gymnasium should be added by raising the roof of the building, and introducing one or two new stories. A large quantity of apparatus for both yard and gymnasium should be provided. Every boy and girl in attendance should be conducted through an elaborate course of bodily training. If they are now kept in school six hours each day, let them be kept seven, under the new regime, and devote during the first year one hour per day; during the second year, two hours each day, and from the beginning of the third year three hours each day to physical training."

The Special Committee to whom Superintendent Philbrick's recommendations were referred on September 11, made a report on December 10, 1860, which was in accord with those recommendations, and not with the elaborate and ambitious scheme outlined by Dio Lewis in the "Massachusetts Teacher." The report voiced the rather panic views which were then current regarding physical degeneracy; but is chiefly remarkable for its categorical preference for the "Ling Free Gymnastics." "This system," (i.e. the Ling), said the Committee of which Mr. G. W. Tuxbury was Chairman, "it is deemed both desirable and practicable to introduce into all our schools, and it is recommended that it be made an obligatory branch of education." The Committee further recommended: (1) the appointment of a Standing Committee on Physical Training; (2) the authorization of said committee to appoint and nominate "a suitably qualified person to aid and instruct the teachers in the training of their pupils in physical exercises;" and (3) that not more than a half nor less than a quarter of an hour be daily devoted to such exercises. These recommendations did not receive the sanction of the School Board until December, 1864, and then only in a modified form. Objections were made to the proposed plan, as we learn from the Annual Report of the School Committee for 1861, "because it created a new committee and another teacher; and it was feared it would

add to the pupils' tasks instead of relieving them. It is thought by some that the end in view might be gained by the general observance of the present rule, which provides that every scholar shall have daily, in the forenoon and afternoon, some kind of physical or gymnastic exercise. . In the Dwight, and in several other schools the present regulation is complied with faithfully." The report notes the fact that increased attention had been shown, within the year, to gymnastics in the English High School, and in the Eliot, Mayhew and Hancock Grammar Schools. In his report, dated September 10, 1861, Mr. Philbrick notes the same fact with satisfaction, and adds, "but in the great mass of the divisions, nothing worthy of the name of physical training has been attempted, and from what I have seen, I think there is danger of harm from injudicious exercises unless this branch is under the instruction of a competent and responsible instructor, who understands not only gymnastics, but also the principles of anatomy, hygiene, and physiology."

It is worthy of remark that the recommendations made by Mr. Tuxbury's committee, in December, 1860, were adopted by the School Board of Cincinnati, Ohio, almost without alteration, nearly four years before the Boston School Committee took final action upon them. In the report of a special committee which was submitted early in February, 1861, to the Cincinnati School Board, we read that " each member of the Board having in his possession a printed Report on Physical Training in the Boston Schools, the Committee deem any further remarks on the utility of free gymnastics unnecessary." Accordingly the Cincinnati Board adopted the main recommendations of the Boston report, and voted to appoint two special teachers of gymnastics who should teach the same as an experiment in six selected schools, - the time allowed for the daily practice of gymnastics in those schools being limited to a quarter of an hour,

instead of thirty minutes, as was provided in the Tuxbury report. This promptitude on the part of the Cincinnati School Board may be explained, perhaps, on the ground that they were better prepared for decisive and intelligent action, by reason of the fact that the Turners' Societies of that city had already demonstrated the adaptability of the German free and light gymnastics, to the purposes of school instruction. At any rate, when it was finally voted to provide instruction in gymnastics and military drill for the schools of this city, it was by many years too late to reap the full advantage of Superintendent Philbrick's suggestion that "Boston, the cradle of the great system of free popular education, should take the lead in showing to the world " how to remedy the defect of neglected physical education. Even in 1860 "the world" was tolerably familiar with several well ordered and successful systems of school gymnastics.

Meanwhile the most effectual of the attempts made to improve the gymnastics, authorized by the Rules of the School Committee, then in force, was that instituted in 1860 by Mr. S. W. Mason, then Master of the Eliot School, — now one of the Board of Supervisors. Mr. Mason has kindly furnished me the following account of his experiment: "I started gymnastics in 1860. I had only seen a class under Dr. Dio Lewis practice gymnastics on the platform at Tremont Temple, and I was so delighted that I determined at once to try them in the Eliot. By reading books in which Ling's system was described, and by practising with my own boys, I became so enamored with the system, and my boys so improved mentally and physically (laggards soon becoming leaders) that I was determined to make my boys proficient in the few exercises we had. I was invited to attend State and County Conventions, teachers' institutes, etc., to lecture and demonstrate the feasibility of introducing gymnastics into our schools, by exhibiting a class of boys. I was frequently importuned by teachers to furnish them

with a list of exercises. In response to many teachers, I made the manual, having in it only such exercises as had been used in the Eliot. The manual was published in 1862, and was used by many schools in Boston and vicinity." "Barnard's Journal of Education," vol. xiv., 1864, pp. 61–68, contains an article by Mr. Mason, on "Physical Exercise in School," which sets forth his views and the results of his experience at some length.

Despite the applause and favor bestowed on the Lewis gymnastics at the outset, rivals to their supremacy soon appeared in the field. Of these, vocal culture and military drill proved the most formidable and enduring. Mr. Lewis B. Monroe, a well known teacher of reading and elocution in Boston, had developed "a system" of vocal and physical exercises that had many adherents. Mr. Monroe grew to be quite as acceptable and influential a lecturer at teachers' conventions and before normal-school audiences, as was Dio Lewis. Moreover, Mr. Monroe was, from the first, the man of Superintendent Philbrick's choice for the work of aiding and instructing the teachers in the physical training of their pupils. He was finally appointed to the post in question, in 1865.

Military drill began to attract the attention of educational authorities early in 1861, when the Chauncy Hall School, in Boston, and certain of the public schools of Brookline organized school companies for martial drill and parade. In 1862 Congress passed the so-called Morrill Act, granting thirty thousand acres of the public lands for each of its Senators and Representatives to every State which should "provide at least one college where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts." The incongruous and rather unreal militarism of the Massachusetts Agricultural College and the Massachusetts Institute of Technology still exists, thanks to the proceeds derived from

the lands granted by the National Government. The Massachusetts Legislature of 1863 devolved upon the State Board of Education the task of considering the advisability of making military drill a regular part of the public school training of boys, more than twelve years old, throughout the State. A favorable report on the matter, drawn up by a sub-committee consisting of Governor Andrew, Hon. Emory Washburn, and Hon. Joseph White, Secretary of the Board, was adopted by the Board. The recommendations of the Board of Education were embodied in two bills, that were advanced two stages toward enactment by the Legislature of 1864; but owing to the efforts of Messrs. Wm. Lloyd Garrison, N. T. Allen, James Allen, Dio Lewis and others, these measures were defeated, and the scheme was dropped.

On November 3, 1863, a petition asking for "a speedy introduction . . . of Military Drill and Discipline into the public schools as a part of the daily exercises," was received by the School Committee of this city. The petition set forth the belief of its signers "as parents that the hygienic effect of a thorough military training would not only be the physical exercises so long talked of for our public schools, but it would inculcate a more manly spirit into the boys, extend their memory, make them more graceful, invigorating and gentlemanly, and by the time they attained the age of sixteen or eighteen years, they would be competent to enter the field either as Privates or Officers." At the same meeting a committee of five, with Hon. George S. Hale as Chairman, was appointed to consider the matter and report upon it. On December 8, 1863, the committee reported, being of the opinion that it was "expedient to introduce instruction in military gymnastics and drill into the Public Schools for boys, . . . and that the instruction should be given by the teachers, and, after a time, in large measure by pupils selected for that purpose under their

supervision," . . . and recommended a trial of the experiment in the Latin, English High, Eliot, and Dwight Schools, one-half hour on Monday, Wednesday, and Friday of each week, "by obtaining a competent instructor in gymnastics and drill, who should instruct some or all of the masters and ushers." On the twenty-second of the same month the School Board authorized Mr. Hale's committee to carry its recommendations into effect. Accordingly Captain Hobart Moore was engaged as Teacher of Military Drill. He has continued to serve in that capacity up to the present time, a period of nearly thirty years! In their report, submitted on December 13, 1864, the "Committee on Military Gymnastics and Drill," note with satisfaction the measure of success which had attended the introduction of military drill in the schools mentioned above. Regret is expressed because "they have not yet made any satisfactory arrangements for instruction in gymnastics independently of the drill, but they all concur in recommending that regular and systematic instruction of that kind should be given.

. They are convinced that it is of very great importance to furnish instruction in gymnastic exercises for the younger male and all the female scholars." The practical suggestions of the committee were embodied in the following orders passed by the School Committee, December 27, 1864:

Ordered: That a Standing Committee of five on Gymnastics and Military Drill be hereafter appointed, whose duty it shall be to enforce the regulations on this subject and to superintend this branch of instruction, making from time to time such recommendations to the General Committee as they shall find expedient.

Ordered: That said Committee be authorized forthwith to employ an Instructor in vocal and physical gymnastics, at a salary not exceeding fifteen hundred dollars per annum, whose duty it shall be to attend the schools at such times and for so much of the time as the Committee shall deem necessary, upon consultation with him and the District Committees, for the purpose of instructing in gymnastic exercises, both vocal and

physical, and of securing careful and regular performance of those exercises at such hours as may be convenient, provided, that not less than twenty minutes per day shall be devoted to this purpose in any grammar school, and not less than thirty minutes in any primary school, in addition to the ordinary recess.

Ordered: That the said Committee, upon consultation with the District Committees, be also authorized to arrange the Grammar Schools containing male pupils into groups, so that the boys of sufficient size to drill with arms, and in numbers sufficient to form a military company, may be instructed together in military drill by a suitable instructor to be employed by the Committee; the hours of drill not to exceed two per week, except voluntary drills out of school hours; and no expenditure exceeding fifteen hundred dollars per annum to be incurred for these purposes without the prior authority of the whole Board.

These orders constitute the "Great Charter of Physical Training in the Boston Schools." The first Committee on Gymnastics and Military Drill, under its provisions, was appointed early in 1865, and comprised the following named gentlemen: George Hayward, M.D., Chairman, Edward H. Brainard, J. Baxter Upham, M.D., Robt. I. Burbank, and William B. Towle. Dio Lewis, then a member of the School Board, is conspicuous by his absence from this Committee. It should be noted that Messrs. Fowle and Hayward had been prominent as pioneers in physical education, nearly forty years before. The transitory nature of "Standing Committees" is illustrated by the fact, that in 1868 only one of the original members of the above mentioned Committee was still a member of it.

Dr. Hayward reported, for the Committee on Gymnastics and Military Drill, on December 12, 1865. This report was not printed. From it we learn that Mr. Monroe having met the committee January 20 of that year, and explained his system of physical exercises and vocal gymnastics, to the satisfaction of the committee the latter had unanimously voted to pay Mr. Monroe \$1,500 for the year ending January 31, 1865, for devoting two hours, in each school day, to the

instruction of the pupils of certain selected schools, viz. the Girls' High and Normal School, the Training School and the first class of the Bowditch School. As a matter of fact Mr. Monroe had given thirteen hours' instruction weekly in the schools named; besides which he had given lectures and conducted exercises for the benefit of teachers and pupils in various other schools. The committee had frequently witnessed Mr. Monroe's exercises. "These exercises consist," the committee go on to say, "not only in teaching the pupils to develope their vocal organs and properly to expand their chests; but to stand in an erect position, to walk gracefully and firmly, and to strengthen their muscles by light and easy gymnastics. Their chief advantage is that they improve the physical powers and condition of the pupils; but they incidentally teach them to pronounce the English language correctly and in a full round sonorous tone; thus doing away with that nasal articulation with which Americans have been so often reproached." One hundred and thirty teachers in various grades were pronounced competent instructors of the system; - teachers' classes having been formed in May, for teachers in the Hancock, Brimmer, Wells and Bigelow districts, who desired "practical drill and careful instruction in precisely those exercises they should give their pupils." Military Drill had been taught by Capt. Moore, in the Latin and English High Schools, and in the upper classes of the Eliot and Dwight Grammar Schools; but the drill had been discontinued in the two schools last named during the latter part of the year. This discontinuance was permanent, I may add. In addition to the \$1,500 appropriated for Mr. Monroe's salary, \$1,150 had been expended to meet the cost of rent, salary, arms, etc., entailed by the military drill. The committee asked and obtained an appropriation of \$4,000 to enable it to secure "Mr. Monroe's whole time during school hours, or its equivalent." Mr. Monroe's salary was afterwards fixed at \$3,000 a year. In 1867, Mr. A. E. Sloane was appointed to assist Mr. Monroe, at an annual salary of \$1,800, which was increased to \$2,500 in 1868. July 14, 1868, the School Board appropriated \$6,700 for the salaries of instructors then under the supervision of the "Committee on Vocal and Physical Culture and Military Drill," which continued to be the title of the committee until 1876, when the department of "Vocal and Physical Culture" was practically abolished, and a Standing Committee on "Military Drill" was instituted.

The work of Mr. Monroe and Mr. Sloane was conducted along the lines indicated above, and consisted in the instruction of the pupils of such schools as they could find time to visit during school hours, and the holding of normal classes for teachers, on holidays and evenings, attendance on which was voluntary. It is clear from Superintendent Philbrick's notice of these classes in his Eighteenth Semi-annual Report, in 1869, that much interest was shown by the teachers in the classes referred to, and that the attendance upon them was good. "That our schools have been greatly benefited by the instruction of this department," said Mr. Philbrick, "no longer admits of doubt in the minds of intelligent and unprejudiced persons. It is scarcely impossible to overrate the value of the improvement in reading which has been produced. . . . The physical training has not proved . . . a complete antidote for the mischievous effects of high pressure. . . I rejoice in what has been achieved: but I am by no means satisfied with the present attainments in this direction. I frankly confess that I regard all that has been accomplished only as a beginning. We must not relax We must be satisfied with nothing short of a our efforts. complete revolution in respect to physical education." In July 1870, a revolution came, but probably not of the kind desired by Superintendent Philbrick. The offices of instructor and assistant were discontinued by the Board, at the recommendation of the standing committee in charge of

physical and vocal training, and Mr. Monroe was appointed Superintendent of Vocal and Physical Culture, "to devote three months of each year to the training of the masters and teachers of all our schools, for the personal fulfilment, in their various divisions, of the work heretofore assigned to the instructor and his assistant. . . . With the aid of the excellent little Manual which he has published he [Mr. Monroe] can in three months see that all our teachers are qualified to do the work themselves." In 1871 Mr. Monroe's name appears for the last time on the roll of teachers in the schools of this city.

In 1872, Mr. W. J. Parkerson was appointed to give instruction in vocal culture for a period of three months. "Rooms were secured in the old Normal School-house, in Mason street, and arrangements were made for daily lessons to be given to classes of teachers of the different grades, at such hours as were supposed to be most convenient for them." It was found that the teachers were too much occupied with their extra drawing lessons to profit fully from the instruction offered them in vocal culture, and the committee were "constrained to admit that the results produced did not meet their expectations." Mr. Moses True Brown, served as Superintendent of Vocal and Physical Culture, for three months in 1873, and for six months in each of the years 1874 and 1875, at a salary of \$2,500 for each period of six months; but the department seems to have been beyond resuscitation, and was abolished in 1876. Excepting certain scarcely recognizable rules and regulations, and Monroe's "Vocal and Physical Training," still retained in the list of text-books; the special teachers of vocal and physical culture in the Girls' High and Latin Schools are the only organic survivals of the system of physical training introduced by Mr. Monroe.

It was not until 1867 that the Rules and Regulations of the School Committee were amended so as to conform in set

terms to the "Orders" passed December 27, 1864. Chap. I. Sect. 2, Rules and Regulations, for 1867, the "Committee on Vocal and Physical Culture" appears in the list of the "Standing Committees" for the first time. Chap. IV. Sect. 9, (ibidem) sets forth the functions and jurisdiction of the Committee just mentioned; while Chap. V. Sect. 2, prescribes the salaries of the instructor and his assistant. Chap. XI. Sect. 11, (ibidem) provides that: "Vocal and physical exercises shall be taught by the Instructor and Assistant in that department under the direction of the Committee on Vocal and Physical Culture; and each Teacher shall give careful and regular attention to these exercises for not less than twenty minutes each day." The time required for exercise was cut down from twenty minutes to ten minutes in 1871, when the above Rule was changed in accordance with the vote passed in July, 1870, discontinuing the offices of instructor and assistant. The amended Rule (being Sect. 11, Chapter XIII. Rules and Regulations, 1871) became Sect. 234, Chapter XVI. of those of 1876, which forms the substance of Sect. 264, Chapter XVII. (p. 45) Regulations of the Grammar Schools (Edition of 1888), and is still in force, reading as follows: "All the classes shall be instructed so that they can take proper physical exercise in concert, in the school rooms, and the teachers shall give careful and regular attention to such exercise for not less than five minutes each session."

Sect. 10, Chapter XII. in Rules, etc., 1867, is found among the Rules of the Latin School. It reads: "Instruction in Military Drill shall be given under the general supervision of the Committee on Vocal and Physical Culture, who are authorized to provide a suitable place and arms for drilling and to appoint a drill-master. The time occupied in drills shall not exceed two hours each week." The above is repeated in identically the same terms, as Sect. 12, Chapter XIV. (Rules, etc., 1867). The regulation now in force as to Mili-

tary Drill, viz. Sect. 283, Chapter XVIII. Rules and Regulations of the School Committee, 1888, is as follows: "Instruction in military drill shall be given in the High Schools, under the charge of a special drill officer, to all boys of good physical condition, who are thirteen years old or more. The time occupied in drill shall not exceed two hours in each week." This rule, in its present form, dates from 1878. Excepting the so-called "setting-up exercises" contained in the Tactics, gymnastic exercises have never been attempted except spasmodically and sporadically in the course of instruction laid down for the boys of the Boston High Schools. Thanks to the energy and foresight of Superintendent Seaver there is a commodious and well furnished gymnasium, over the Drill Hall, set apart for the use of boys belonging to the English High and Latin Schools; but, as I have already remarked, it has never been found feasible to organize thorough going and genuine gymnastic teaching in connection with this gymnasium. Superintendent Seaver on March 31, 1881, in his first report which was the first of the series of annual reports of the Superintendent of Schools, reports "that there is money ready for the purchase of apparatus, but there are some questions as to the nature of the instruction to be given and the kinds of apparatus to be used that need to be definitely settled before any outlay is made. Without a good system of instruction and without proper supervision of the exercises the boys will profit little by the use of the gymnasium. . . . In making out a course of physical training for our Latin and High School boys, we probably could not do better than to follow, in general, the example of the Hemenway Gymnasium in Cambridge." The course pursued at Cambridge, outlined in a letter from Dr. Sargent, is then given. The gymnasium was furnished with a set of the Sargent developing appliances in due time, but, no thorough going system of instruction having been put in operation, comparatively

little use has ever been made of them. Military drill seems to be considered a satisfactory substitute for gymnastics in the schools in question.

One finds in studying Superintendent Philbrick's reports, which extend over nearly twenty years, that his views regarding school sanitation and scholastic hygiene underwent a steady expansion and growth. This is strikingly the case as regards his reiterated expressions of opinion upon matters pertaining to physical training. He found ground for encouragement in every measure, no matter how feeble and halting, for the improvement of the physique of the school children; at the same time he never felt satisfied that any very flattering progress was made in this direction, excepting in military drill. Within the period 1860 to 1876 inclusive, direct reference to physical training, in one or another of its phases, was made at least twelve times by Mr. Philbrick in his reports to the School Committee. The report of September 1869, which notes the character and progress of the work prosecuted by and under Messrs. Monroe and Sloane; the report of September 1872, in which a review of twelve years' progress is set forth; and the reports dated respectively September 1874, and December 1876, are worthy of special mention. In the 1872 report, having noted the changes whereby the average physical condition of the pupils in the schools, during the previous twelve years, had been improved, Mr. Philbrick feels "bound to say, and to say with emphasis, that there is still great room for improvement in physical culture. We ought to aim, not merely to avoid INJURING the health of pupils while carrying on their instruction in our schools but to increase their physical health, strength and beauty. . . You may say that the exigencies of modern society demand some sacrifice of physical health and strength to intellectual attainments. For one I deny the soundness of this doctrine altogether. Complete physical health and development is essential to the truest and best intellectual results of education. All we have done in the interest of school hygiene during the past twelve years, is far, very far from being what we can safely accept as a satisfactory finality. It is in truth only a beginning of the vast work yet to be accomplished, if we mean to make our system of education a complete success." Mr. Philbrick visited Europe, in 1873, and was much impressed, as well he might be, by the superiority of the German school gymnastics to the American. In his report for 1874, Mr. Philbrick says: "The all-important point has been gained of securing a general recognition of gymnastics as a branch of school culture. It remains to be fully provided for and developed." This is his summing up of the outcome of the whole Monroe and Lewis movement so far as the Boston schools were concerned. Then he goes on to say: "After witnessing the methods, means and results of gymnastic training in European schools, I am more than ever anxious that it should receive greater attention in America. Vienna, every modern school-house has its gymnasium, and every school, one or more gymnastic teachers, - one hundred and ten special teachers of this branch being employed in the public schools of the city."

In his report for 1876, Superintendent Philbrick devotes some twenty-five pages to the subject of "School Hygiene." His remarks on physical training, contained therein, well repay perusal, as they not only show how his views had been enlarged and clarified since his first presentation of them in 1858, but also because they constitute the fullest and most forcible treatment of the subject to be found in the annals of the School Committee, in the interval between Mr. Tuxbury's report, in 1860, and Mr. Peterson's report on physical training, presented in the name of the Board of Supervisors, in 1889. I append some of the most striking passages in what proved to be Mr. Philbrick's last communi-

cation to the School Board on the subject of physical training:

Twelve years ago a special teacher of vocal and physical culture was appointed by the Board to direct and instruct the teachers in this twofold branch of Education. That teacher, Professor L. B. Monroe, exerted a most beneficial influence in our schools, although he was too little encouraged and seconded in his efforts. The system of gymnastics taught by him is excellent, so far as it goes; but it does not comprise all that is required in a complete system of physical training. . . . Since the discontinuance of his services there has been apparently no progress in physical training in our elementary schools. Even a backward step in this matter seems to have been taken in the new regulations, in cutting down the time allowed to physical exercise. every scholar must have each session not less than five minutes of physical exercise, whereas previously the requirement was ten minutes each From my observations in the schools during the last half year, I conclude that there are schools where even the present infinitesimal requirement is disregarded. On the other hand, special provisions were made for the regular and systematic gymnastic training of the pupils of the Latin School, in a well-furnished gymnasium, by one of the masters who had enjoyed the benefit of the excellent system of culture at Amherst College. The Girls' High School has a good gymnasium, and the pupils have received a limited amount of regular instruction in it. A Swedish lady, thoroughly qualified, both practically and theoretically, to teach the Ling system of free gymnastics, was employed in this school for a time, [in 1874] with apparently excellent results, and it is to be regretted that her services were not continued. . . . No school-rooms in the world are better adapted than our own for free gymnastic exercises. But besides the frequent brief periods of exercise in the school-rooms, a longer and different drill should be given once or twice a week in a gymnasium, such as any of our grammarschool rooms would make; and I should be glad to see one of the school-rooms in each of our grammar-school buildings set apart for this purpose. . . . Three years ago I visited the Victoria School, in Berlin, which is, perhaps, in point of merit, second to no other public high school for girls in Europe. After looking over its excellent accommodations, . . . I was invited to attend the gymnastic lesson of the upper classes. This was given in the Städtische Turnhalle (City Gymnasium), a large fine building, with every appliance and convenience requisite for its purpose, which is in the immediate vicinity of the school. From a hundred to a hundred and fifty of the older

girls were present. The exercises were not conducted by special teachers, but by regular professors in the school, who had qualified themselves to teach this branch. The system of training was in all respects admirably adapted to the age and sex of the pupils. As I viewed that spectacle I was more strongly impressed than ever before with the value and importance of appropriate gymnastic training for girls. The subject was not new to me. For many years it had to a considerable extent occupied my attention. But the illustration then witnessed carried to my mind that sort of conviction which lasts as a motive to action; and that conviction is felt at the present moment as a motive impelling me to urge the importance of gymnastic training in schools.

Superintendent Philbrick's recommendations as set forth above are more explicit, more forcible, and wiser than were those presented by him in 1858 or 1860. But physical training, excepting the department of athletic sports was not in fashion, either with the general public or in educational circles, in 1876,—accordingly his words fell upon indifferent or preoccupied ears, and led to no result. The experiment of making physical training a feature of the Latin School course became moribund about the time the above allusion to it was penned. A new era in college gymnastics opened in 1879, but it was not until 1889 that any considerable or vital interest in school gymnastics declared itself in Boston, or even in New England, outside of a few preparatory schools.

The worth of a good physique and the educational value of physical training were most clearly demonstrated and sharply emphasized by the lessons of the late war. The unexampled interest and activity in athletic sports developed since the close of the war have contributed most materially toward the promotion and appreciation of physical training.

Next to the athletic revival, the cause of physical education in America has received its greatest impetus, in recent years at least, from the organization by Harvard University, in 1879, of a new department of physical training in connec-

tion with the Hemenway Gymnasium, for whose erection and equipment Mr. Augustus Hemenway, of Boston, and a graduate of Harvard in 1876, gave the sum of \$115,000. To Dr. D. A. Sargent, the director of the Hemenway Gymnasium since its opening thirteen years ago, we owe the invention of the so-called Sargent system of developing gymnastics. The Sargent system, which in its original or modified form has been adopted in most of the college and Y. M. C. A. gymnasia of the country, is the most original contribution that America has made to the cause of physical training. The Sargent gymnastic machines, numbering nearly sixty, employ the so-called "pulley-weights" in variously modified combinations, so as to call certain groups of muscles into action, while comparatively little muscular action is called for in the rest of the body. By the use of these machines one can exercise his back, loins, thigh, forearm, arm or hand muscles, according as his own taste or the opinion and advice of his instructor may dictate. The director of every gymnasium, where the Sargent system is in vogue, habitually makes a careful physical examination, on which he bases his prescription of such exercises as will tend to remedy defects and promote symmetrical growth and harmonious development, in each particular case. The Sargent gymnastics are dietetic rather than strictly educative in their aims, and most of the Sargent machines are not well adapted to the purposes of class-gymnastics; most well equipped gymnasia therefore are furnished with heavy apparatus of the very kind that Dio Lewis professed to have driven from the field.

Dr. Sargent's idea of scientifically directing and controlling gymnastics and athletic work is thoroughly admirable and practical; but the effect of using the Sargent apparatus stops short of muscular development in its higher sense, since by means of "pulley-weights" it is possible only to enlarge and strengthen the muscles, without teaching skill and discrimination to the nerve centres with which the

muscles are connected and by which they are animated and controlled. The use of the Sargent machines may promote the healthful nutrition of muscles, nerves and brain, but does not tend to develope sleight or skill directly, which should be one of the aims of every comprehensive system of physical training. It is safe to say that seventenths of all the gymnasia in the country contain larger or smaller collections of the Sargent developing appliances; but so far as I know, no public-school board has provided them for the use of all the pupils in any grade.

The completion of the Hemenway Gymnasium and the induction of Dr. Sargent as its Director, in 1879 gave a great impetus to the improvement of then existing gymnasia and the erection of new ones; while the rapid spread of the Sargent system of "Developing Exercises" led to a general reform in the organization and management of the department of physical education in very many colleges and fitting schools for both sexes, and also in those belonging to the Young Men's Christian Associations. The organization of Athletic Clubs having elaborate and costly buildings and extensive athletic fields, soon became the fashion. In the thirteen years that have elapsed since the completion of the Hemenway Gymnasium, at least \$1,000,000 have been expended in building and furnishing school and college gymnasia. In a recently published paper by Dr. Sargent the following statement is made: "The amount of money expended in the United States on gymnasia, Athletic club buildings and grounds, apparatus, etc., is difficult to estimate accurately, as many athletic organizations have rooms in buildings used for other purposes; but it may be roughly stated that between 1860 and 1870, it was \$200,000; between 1870 and 1880, \$500,000, and from 1880 up to the present time (April 1891) considerably over \$5,000,000." Yale, Cornell, Bowdoin, Haverford, Lafavette, Lehigh, Washington and Lee, Rutgers, Leland Stanford, the Johns Hopkins, Vanderbilt, the University of Pennsylvania, Gettysburg College, and the Elmira Reformatory, among institutions for men, and Vassar, Bryn Mawr, the Bryn Mawr School and the Woman's College of Baltimore, among institutions for women, have followed the example originally set by Amherst College, in 1860, and reset by Harvard in 1879, by choosing physicians as directors of their gymnasia.

It seems unlikely that the colleges will ever revert to their primitive and ill-advised custom of installing retired pugilists or broken-down athletes as directors of physical training. This is an important and praiseworthy achievement. It is also clear that, by reason of the increased attention given to athletics and gymnastics, there has been a marked improvement in student hygiene and morale within the past twenty years. Nevertheless, it cannot be gainsaid that the majority of our school and college gymnasia are but rudely organized and inefficiently managed, so far as the true ends of genuine physical training are concerned. This condition of things is largely due to the fact that faculties and boards of trust, in their zeal for building and the acquisition of plant, have overlooked or neglected the plain teachings of science with regard to the nature and relations of bodily training, and also the lessons of experienced common sense, both at home and abroad, as to the ways and means best adapted to secure the educative ends of such training. In short there has been a lavish expenditure of money for mere appliances, which would be ludicrous, if it were not symptomatic of feebleness of purpose and poverty of ideas. Our colleges, therefore, with but few exceptions, have not been in a position to speak with authority on the question of what constitutes a well ordered and practicable system of physical training for elementary and secondary schools. Consequently, though the school boards of several American cities, which have achieved laudable success in providing for the bodily education of the pupils in their public schools, may have been partially impelled to action owing to the stir caused by the revival of college athletics and gymnastics,—their course of action has been chiefly shaped and determined by non-academic forces and agencies. In other words, the successful inauguration of school gymnastics by the cities of Chicago, Kansas City, Cleveland, Denver, Indianapolis and Boston has not been due to the example or aid of our higher institutions of learning; but rather to the insistence and zeal of the advocates of the German and Swedish systems of gymnastics who were prepared to speak with knowledge and to act with intelligence.

When we consider how large and influential an element the Germans constitute in the cities of the West, and recall the fact that the North American Turnerbund for many years has been the largest, most widespread and most efficient gymnastic association in the Union, it is not at all surprising that all the cities named above, with the exception of Boston, should have adopted German forms of exercise and German methods of instruction, as soon as it was decided to make physical training a part of the Public School curriculum. The Turnerbund is worthy of more than mere passing mention. It has developed from Turnvereine founded by political refugees who found asylum in this country after the revolutionary year 1848. The last report of the Turnerbund, that is accessible at this writing, shows that, on April 1, 1889, it had a membership of 31,869. Its property free from debt was valued at \$2,390,000, including 160 gymnasia and libraries aggregating 53,000 volumes. In the gymnastic schools maintained by the Bund, the number of pupils including 6,055 girls was nearly 22,000, - showing an increase of nearly 6,000 pupils in five years. The Bund's corps of salaried teachers of gymnastics numbered 140, most of whom had been specially trained for their work in the Bundes-Seminar, or Normal School, which is the oldest institution of the kind in the country. The gymnastic schools, whose

pupils are all too young to be members of the Turnvereine, have grown up within the last fifteen years; and were established primarily to afford instruction in gymnastics and the German language to the children of members of the Turnvereine, because such instruction was inadequately given or utterly neglected in the public schools. In many of the larger cities the Turnvereine have dramatic, musical, and art sections, and some of them maintain classes in drawing and modeling, and in manual training, sewing, etc. The theoretical principles of the Turnerbund are too heterogeneous and numerous to be considered in this connection: suffice it to say they are extremely and fantastically radical. Its practical aims, that are relevant here, are well set forth in the following extract from its statutes:

- 21. It is one of the chief aims of the gymnastic societies, and of the gymnastic union, to labor for the introduction of systematic gymnastic training into the existing schools, since such training is indispensable to the thorough education of the young.
- 22. It is therefore obligatory upon the gymnastic societies to see that their gymnastic exercises are conducted according to rational principles, and to take special care to employ only such persons as teachers of gymnastics, supervisors of exercises, and leaders of practice sections as are thoroughly qualified to understand and teach gymnastics in harmony with those principles.

It is furthermore the duty of the societies to labor in their own sphere for the establishment and perfection of good German-English schools, in which music, singing, drawing, and gymnastics receive full attention, and to work in favor of compulsory school attendance; and lastly to take pains to have the German language taught in the public schools.

That a really practical and efficient system of class-instruction in free, light and heavy gymnastics should be in relatively successful operation in nearly all of the large cities of the West and North, including our own, during much of the period 1860–1885, without exciting the attention or rousing the emulation of such advocates of physical education as President Felton of Harvard, who was likewise

President of Dio Lewis's Normal Institute for Physical Education, and President Stearns of Amherst, to whom the introduction of obligatory gymnastics in that college in 1860 was chiefly due, and Superintendent Philbrick of Boston, or of such "system-makers," as Miss Allen, Miss Beecher, Dio Lewis, and Lewis B. Monroe, is truly an extraordinary circumstance. The truth would seem to be that the Turners were chauvinistic and distant, while the educational world, despite occasional gusts of theoretical enthusiasm, was on the whole apathetic and incurious with regard to the practical side of physical education.

Since 1884, at about which time the Turnerbund made a course in English an obligatory part of its Seminar curriculum, the efforts of that association towards securing the spread of public-school gymnastics have been much more successful than at any previous time. In the schools of Chicago, Cleveland, Kansas City, and Indianapolis the Directors of Physical Training are all graduates of the normal school of the Turnerbund. In October, 1885, physical training was made obligatory for teachers and pupils throughout all grades of the public schools in Kansas City. The following extract from a paper presented in April 1891, by Mr. Carl Betz, Director and Supervisor of Physical Training, of the Kansas City schools, at the sixth annual meeting of the American Association for the Advancement of Physical Education sets forth the characteristic features of the Kansas City system of physical training.

Our system of exercises in the main is the German system, although certain features of other systems, notably of the Swedish, are encouraged, and allowed to develop in the schools.

American plays and games of educational merit are given preference over those of other nations.

The Kansas City system of physical training, at the present stage of its development in the schools, comprises the following exercises,—all of which are known as disciplinary exercises.

I. Free Gymnastics. — (a) By word of command; (b) With music;

- (c) With singing (the singing by another class); (d) With breathing exercise.
- II. Light Gymnastics. (a) Long wands; (b) Short wands; (c) Dumb-bells; (d) Rings; (e) Indian clubs, without and with music.
- III. Tactics.—(a) Plain marching without accompaniment; (b) Plain marching with castanets; (c) Plain marching with singing; (d) Plain marching with music; (e) Plain marching to the beat of the drum; (f) Fancy marches with music; (g) Fancy marches with singing; (h) Fancy steps with music; (i) Fancy steps with singing; (j) Fancy steps with castanets; (k) Marching with free gymnastics.
- IV. Popular Gymnastics, Out-of-door Sports and all Competitive Exercises.

Exercises for Boys.—1. Fast walking; 2. Running; 3. Standing long jump; 4. Running long jump; 5. Hop, skip and jump; 6. Standing high jump; 7. Running high jump; 8. Pushing the pole; 9. Pushing wands; 10. Pulling wands; 11. Tug of war; 12. Pitching the stone; 13. Throwing quoits; 14. Ring-toss; 15. Bean-bag; 16. Ball games; 17. Lifting and carrying; 18. Wresting the wand; 19. Wrestling.

Exercises for Girls.—1. Fast walking; 2. Running; 3. Long rope jumping; 4. Short rope jumping; 5. Double rope jumping; 6. Circular rope jumping; 7. Throwing grace hoops; 8. Ring-toss; 9. Bean-bag; 10. Ball games; 11. Carrying sand cushion on head.

- V. Outings. Excursions into the woods, etc., etc.
- VI. Fancy Gymnastics. Public exhibitions at the close of the school year.

In addition to these exercises, it is my intention to introduce into the schools, as soon as practicable, gymnastic exercises on stationary apparatus. The large and spacious, airy and well-lighted attics of all the new school buildings will be utilized for this purpose.

When this has been accomplished our schools will have a complete system of physical training, meeting, reasonably, all the requirements of modern physical education.

For the most part, all our gymnastic exercises are taken in large, airy halls, or on the playgrounds. The class-rooms are used only when there is no other alternative, and then they are thoroughly ventilated during the exercise. Each and every class in the Kansas City school district has a daily physical exercise of not less than ten minutes' duration. In the lower grades free gymnastics, in the higher grades light gymnastics, constitute the basis of the work. Marching drills are given daily in all of the grades. Whenever the schools are called or dismissed, the pupils march into and out of the buildings in a body, in military order, keeping time and step to the beat of a drum. As often

as the weather permits, principals give their schools, in a body, a short calisthenic drill on the playground before passing into the building. Ten minutes of the afternoon recess are devoted to out-of-door sports. Boys and girls exercise in separate divisions, each grade forming a group by itself. The principal directs and supervises the exercises, his teachers assisting him.

The director of physical training visits the schools as often as a division of his time among all the schools will allow. At the present time, this is once in four weeks. As yet we have no professional assistant teachers in the department. By order of the Board of Education, the principals of the schools act as assistants, *i.e.*, they are responsible to the director for the work in their respective schools.

In order to give the patrons of the schools an opportunity of seeing the gymnastic work done in the schools, an exhibition is arranged at the close of the school year in one of the opera houses. These exhibitions are very popular in Kansas City, and have been a revelation to many of what can be accomplished in school gymnastics.

The results of physical training in the Kansas City schools are clearly perceptible. Compared with former years: There is less boisterous conduct on the playground, pupils move about in the halls and classrooms with less noise and greater ease; during study and in the recitations the pupils are better able to fix their attention, etc. Especially prominent is the improvement in the carriage of our boys and girls.

Teachers, too, have gained by giving the gymnastic instruction. Being compelled through circumstances to take hold of the work and held responsible for their teaching, they have become excellent disciplinarians. It seems to me as if physical culture had changed the very atmosphere in our schools.

Director Betz writes me as follows concerning his method of instructing the teachers: "When I first began the work in the schools, I gave instruction to all the teachers and principals in a body. In the beginning all had the same work,—the rudiments of gymnastics. The teachers metevery Saturday at the Central High School for three successive months. It was made obligatory upon all to attend these classes. After that I had the teachers meet for drill once a month, in a body; still later once a term, in sections,—each grade by itself. It was not until the third year that I secured satisfactory teaching from the teachers."

The following facts concerning gymnastics in the Chicago Schools have been kindly furnished me by Mr. Henry Suder, the Superintendent of Physical Culture, in that city:

In November 1885 physical culture was introduced into four public Grammar Schools. After a successful trial, the Board of Education introduced it into all the Grammar Schools, and for this purpose a Supervisor and eight teachers were appointed in June 1886. The principals and teachers of the Primary Schools having asked for the introduction of physical exercises, they were introduced into all Primary classes in January 1889, by the unanimous vote of the School Board; and four months later they were introduced into all the High Schools: The staff of the department of physical culture numbers at present twenty-four: viz., a superintendent, two teachers for the High Schools, nine teachers for the Grammar and twelve for the Primary Schools, all of whom are men, and all but two from the Turnlehrer Seminar. For the year ending June 30, 1890, \$13,620 were appropriated for the teachers' salaries. In 1891 the appropriation was \$25,000. There is no special normal class for the training of teachers, and no such classes have ever been held. Class teachers, especially in the Primary Department, conduct the exercises on the days when the special teacher does not visit the school. The training of the class teachers begins after the special teacher has taught the class for some months. Pupils in the Grammar grades have a ten minutes' lesson, in gymnastics twice a week; and each Primary School is visited by a special teacher twice a month. The exercises in the latter schools consist of Free Movements; the Grammar classes practise Wand exercises in addition; while Indian clubs and dumb-bells are used in the High Schools. The exercises take place in the aisles of the school-room; and in the halls of such buildings as have halls. A gymnasium, 90 by 40 feet, has been provided in one of the newly erected High Schools, which will in due time be furnished with modern apparatus for the practice of heavy gymnastics. The average attendance in the Chicago schools in 1891, was 129,000, out of a total enrolment of 141,435 pupils.

In Omaha, Neb., St. Joseph, Mo., Canton, O., Denver, Col., and Louisville, Ky., the Chicago plan of having special teachers has been adopted, while the Kansas City plan of having a single director, without special assistants, has been followed in Milwaukee, Wis., Cleveland, O., McKeesport, Pa., Davenport and Keokuk, Ia., Rock Island and Cairo,

Ill., and a considerable number of smaller towns in Kansas, Iowa, Missouri, and Indiana. It should be said, however, that, with the exception of Cleveland, and Denver, the physical training given in the towns named in the above lists, is not nearly so comprehensive or systematic as in Chicago and Kansas City. Within the last year the Free Movements taught in the schools of Cleveland have been modified by a slight admixture of Swedish movements.

Unlike their Teutonic kindred, the Scandinavians of this country, as a class, have made no general or effective propaganda for their national gymnastics. The rise of Swedish school gymnastics in America within the past five years has been due to American initiative and endeavor. The appointment, in 1874, of a Swedish teacher, for three months' service in the department of physical culture in the Girls' High School, of this city, seems to have been a merely fortuitous circumstance. In 1886-87, instruction in Swedish "Freestanding-movements" was given with marked success by Mr. Nissen, in the Johns Hopkins University Gymnasium, of which I was then Director. The gymnasium of the Woman's College of Baltimore, which was opened in 1888-89, and is in some respects without a rival in the country, was fitted with Swedish apparatus at the outset, and has always been managed in strict accordance with Swedish principles, the class-instruction being intrusted to graduates of the Royal Central Gymnastic Institute only. The gymnasium of the Bryn Mawr School for Girls, also in Baltimore, which was opened in 1890, likewise has a Swedish teacher for Swedish work.

But Boston has earned the right to be considered the most influential centre, in America, of the movement for promoting swedish educational gymnastics. This result, which has been brought about within the last three years, is primarily due to the wisdom, generosity and public spirit of Mrs. Mary Hemenway, and secondarily to the discussions, reports, and votes of your Honorable Board precedent to its

adoption of the Ling gymnastics for the public schools, on June 24, 1890. The establishment by Mrs. Hemenway of the Boston Normal School of Gymnastics which already has no equals and few rivals in the country, as regards the genuine and thorough-going character of its training, is an event of capital importance in the history of physical training in America, and may well be ranked beside the gift to Harvard University of the Hemenway Gymnasium by Mr. Augustus Hemenway, her son.

The Boston Normal School of Gymnastics had its beginning in October 1888, when at Mrs. Hemenway's invitation a woman's class, composed of twenty-five public-school teachers, was formed for the purpose of testing, under the instruction of a trained Swede, the adaptability of the Ling gymnastics to use in the Boston schools. The experiment proved so satisfactory that, on April 25, 1889, Mrs. Hemenway offered to provide similar instruction, for one year without expense to the city, for one hundred teachers of the public schools, who should be permitted to use the Ling gymnastics in their several schools. June 25, the School Board voted to accept this offer, and in the ensuing September the class was formed. On September 1889, the Board accepted "with grateful appreciation, the generous offer of Mrs. Mary Hemenway to provide a teacher of the Ling system of gymnastics, for service in the Normal School, free of expense to the city." Mrs. Hemenway's further offer to provide free instruction "for those masters and sub-masters who may desire to make a thorough study of the Ling system for the benefit of the Boston public schools," was accepted by the Board on October 22. Mrs. Hemenway continued to maintain the "masters' class," and to provide the Normal School with a special teacher of Ling gymnastics throughout the school year 1890-91. The "masters' class" numbered 50 in 1889-90, and 57 in 1890-91. In 1889-90 there were 190 women engaged in teaching in the public

schools who received instruction in the Boston Normal School of Gymnastics. In 1890-91 the number was 140. Its first class of graduates, numbering 33, was graduated June 6, 1891. The demand for the services of graduates and pupils of this school, as special teachers of Ling gymnastics, greatly exceeds the supply.

October 8, 1889, the Committee on Hygiene, which had been given full powers in the department of physical exercises, (on March 12), presented a well-considered "Report of the Board of Supervisors on Physical Training in the Public Schools." (School Doc. No. 10, 1889.) The concluding recommendations of the Supervisors were as follows:

- 1. That the Ling system of gymnastics be the authorized system of physical training in the public schools, and that it be introduced into them as soon as teachers are prepared to conduct the exercises.
- 2. That a competent teacher of this system be employed to train the pupils in the Normal School and the teachers in the public schools.
- 3. That, for the coming year, provision be made for training at least the pupils in the Normal School, and the teachers of the first and second classes of the Primary Schools, and the fifth and sixth classes of the Grammar Schools.

These recommendations were approved by the majority of the Committee on Hygiene, and a minority report was made by Miss Hastings. Both reports were tabled. December 10, "the whole subject of physical training in the public schools was referred to the next School Board."

Meanwhile on November 29 and 30, 1889, Boston was the scene of the largest and most notable Conference on Physical Training ever held in the United States. Dr. W. T. Harris, the United States Commissioner of Education, presided over its deliberations. The call for it was signed by John W. Dickinson, Secretary of the Massachusetts Board of Education; E. P. Seaver, Superintendent of the Boston public schools; Francis A. Walker, President of the Massachusetts Institute of Technology; and by the

Presidents of Boston University, Colby University, Maine, and Wellesley College, as well as by many members of the Boston school committee and a large number of physicians and others prominent in educational circles. The audience at each of the four sessions of the conference numbered from fifteen hundred to two thousand persons. The major part of the audience consisted, doubtless, of Boston and Massachusetts normal and public school teachers; but New York, Baltimore, Brooklyn, and Washington, and other cities also, were represented. So, too, were Harvard, Yale, and Johns Hopkins Universities, and Amherst, Haverford, and Bowdoin Colleges for men, and Vassar, Smith, Wellesley, Bryn Mawr, and the Woman's College of Baltimore for women.

The programme which embraced papers, discussions, and illustrative class exercises in gymnastics, was a varied and interesting one, and served not only to set forth the general nature and effects of muscular exercise, but also the salient principles and characteristic methods of the German and Swedish and so called "American" systems of school gymnastics. Similar discussions, and illustrative gymnastics on a large scale, signalized the Fifth Annual Meeting of the A.A.A.P.E., held in Boston in April 1890. The public and educational mind was much awakened and not a little enlightened, by reason of so much discussion and exposition.

January 16, 1890, a Standing Committee on Physical Training was appointed. Dr. W. A. Mowry its chairman, made an exhaustive report on June 24, embodying the results of a wide tour in the West and South to observe the peculiarities and workings of various systems of physical training in public schools. The committee, without a dissenting vote, recommended the following:

(1.) Ordered, That the Ling or Swedish system of educational gymnastics be introduced into all the public schools of this city.

- (2.) Ordered, That the appointment of one director of physical training, and four assistants, be authorized.
- (3.) Ordered, That the salary of the director of physical training be \$2,640 a year, and that the salary of each assistant be \$1,080 a year.

The following order was substituted for the second and third orders appended to the report:

Ordered, That a director of physical training and one or more assistants be employed, the total salaries for the same not to exceed the sum of five thousand dollars (\$5,000) per annum, and that the Committee on Physical Training be authorized to nominate suitable persons for these positions, to commence at the beginning of the next school term.

In accordance with the above orders, the present Director of Physical Training was elected on November 25, 1890, at a salary of \$3,000 per annum; and the present Assistant Instructor was elected March 10, 1891, at a salary of \$1,680.

The example of Boston with regard to the introduction of the Ling gymnastics has been followed more or less completely, either by way of experimental trial or of formal adoption by Somerville, Waltham, Woburn, Lynn, Worcester, New Bedford, Fitchburg, Leominster, Andover, North Easton, Cambridge, Lawrence, Gloucester, Brookline, Rockland, and Clinton, in Massachusetts, by Dover, N. H., Pawtucket, R. I., and Hartford, Conn. The School Board of New York City last year authorized the trial, in a small group of schools, of school gymnastics. The system, which was provisionally adopted, is ultra-American—i.e., it is so extremely eclectic that it may fairly be termed nondescript.

At the present day gymnastics in Germany include the popular gymnastics of the *Turnvereine*, school gymnastics, and military gymnastics, the latter being a modified form of school gymnastics. School gymnastics include free movements, light gymnastics, or exercises with light apparatus such as wands, dumb-bells, and clubs, and *Gerätübungen*, or

exercises on the more difficult gymnastic machines. Spiess introduced "class" and "order" gymnastics nearly fifty years ago, thereby making it possible for the ordinary teacher of a school class to teach gymnastics to all his pupils, in much the same way that other branches of study are taught. In the army and in the schools, exercises of all sorts are executed by the class or division at the word of command. In the Turnvereine, free and class gymnastics are also conducted in the manner alluded to above; though in heavy gymnastics the employment of foreturners or squad leaders is retained. Both Germans and Swedes have outgrown the childish practice, so common in America and England, of teaching gymnastics by means of memorized and musical drills. Indeed, I doubt if German or Swedish teaching was ever hampered by such inept and ineffectual methods. Popular gymnastics have never occupied the foreground in Sweden, and have assumed extremely little prominence, even in the background, till within rather recent years. In Norway, popular gymnastics are only semi-Swedish.

In comparing German and Swedish school gymnastics, the distinction between an artisan's kit of tools and an instrument of scientific precision suggests itself. Swedish gymnastics owe their distinctive features of simplicity of form, compactness and balance of parts, finish and precision of method, to Ling and his successors at the Royal Central Gymnastic Institute in Stockholm, which has been maintained by the Crown as a normal school, for the education of civilian and military teachers of gymnastics since it was opened, at Ling's instance, in 1814. Ling's principal writings are poetical; but he had more of the patient, critical, scientific spirit than Jahn, the "Father of German Turning," and did his best to discover the physiological and pedagogical laws which should underlie every rational scheme for the bodily training of children and youth. His natural impulses, and the exigencies of his position as an official teacher of teachers

and of military cadets, combined in leading Ling to adopt simple, direct and orderly measures. He made use of both free and class exercises before Spiess introduced them into German gymnastics. Apparatus gymnastics, though regularly employed by the Swedes, are given less prominence than is accorded them by the Germans. Certain gymnastic machines which are favorites with the Swedes are not used in Germany, and vice versa. Gymnastic games and fencing are employed both by Swedish and German teachers of school gymnastics. Much less care and attention have been given in Germany than in Sweden to physiological considerations, in the selection and arrangement of gymnastic movements; therefore the Swedes reject many forms of exercise as useless or injurious which pass muster in Germany. For example, the Swedes discard exercises that tend to constrict the chest, those that require the breath to be held, and those producing continued pressure on the larger vascular or nerve trunks. One of their most stringent rules is, that all movements should help and not hinder full, free and regular breathing. Swedish gymnastics surpass all other forms of pedagogical gymnastics, in the care taken in co-ordinating the exercises belonging to a single "day's-order," not only with regard to each other, but also with regard to the "day's-orders" which have been practised, and the "day's-orders" that shall follow. By means of the "day's-order" or "table" and the principle of "gymnastic progression," which they alone have fully worked out and adopted, the Swedes are enabled to order and vary their school gymnastics, from day to day, from month to month, and from year to year, in a graded series. By this means continuity is secured in the instruction; and the pupils, of whatever age or condition of health, are advanced from simple, easy, and absolutely safe exercises, to those that are complicated, difficult, or comparatively dangerous. Class-leaders and memorized drills have no place in instruction of this kind. All exercises, whether by

a full class or by a squad, are executed at the word of command. Continuous, progressive, and comprehensive gymnastic training cannot be secured by mere imitation of a leader, or by executing memorized exercises over and over again. Change and variety are necessary, and must be had. They are best secured in school gymnastics, by recognizing the laws of physiology and by following the principles of sound teaching.

Compared with teachers of gymnastics in any other country, those of Sweden are a small and highly trained corps. From its inception, the majority of the pupils of the Central Institute have been young officers in the army and navy, so that teachers of gymnastics in Sweden hold a better social position than elsewhere. Under special circumstances one may, by passing the required examinations, be licensed to teach without taking the course at the Central Institute, a course, be it said, more extended, comprehensive and severe than is the case in any other European normal or military gymnastic school. The influence and traditions of the Central Institute are paramount in all branches of Swedish gymnastics, and have made them what they are.

Hitherto, school gymnastics in Switzerland, Austria, Belgium, Denmark, Russia, Italy, England, and even in France, have followed or resembled German school gymnastics in the main; but in France, Denmark, England and Russia a tendency to adopt or approximate towards Swedish methods has declared itself, recently. In my opinion, the Swedish system is better adapted to the needs of school children, between the ages of seven and fifteen, than any other. For boys above fifteen and collegians—at any rate in England and America—I am inclined to think an admixture of German forms of exercise will be found advantageous; but I would have them grounded in Swedish gymnastics to begin with.

Our knowledge of the nature and needs of the human body and mind, in health and disease, has been enormously increased and enlightened within the last sixty and, especially, the past thirty years; therefore the teachings of science regarding the nature and scope of physical training, of all human training, in fact, have gained concomitantly in weight, energy, and point. The following summary and incomplete statement of their teachings must suffice here. Speaking broadly, the muscular and nervous tissues, well termed the master tissues, constitute the executive or working mechanism of the body; and the chief function of all the other tissues of the body is to serve either as their purveyors or scavengers. The nervous tissue is the masterful tissue by reason of its animating and controlling influence upon all the other organs of the body. The main field of education is the nervous system, and at least three-quarters of school instruction being directed, wittingly or unwittingly, to the development of orderly, purposive neuro-muscular actions; we cannot escape the conclusion that systematic and welldirected exercise of the muscles is requisite for the maintenance of the health of the brain and for the development of its full powers. The structural integrity and functional power of the purveyor and scavenger tissues are indirectly promoted by muscular activity; while the most important direct effects of muscular exercise are, (1) the attainment or maintenance of normal size and strength by the master tissues, and (2) the acquirement of correct and economical habits of neuro-muscular action. The ends of physical training, then, are hygienic on the one hand and educational on the other. No comprehensive system of physical training can be considered safe or rational in which these ends are not clearly recognized and intelligently provided for through the adaptation of its exercises to the varied and varying wants and requirements of the individuals to be trained, in respect to their sex, age, strength, mental capacity, and calling in life. The results which should be secured by such a system are briefly these: Erect and graceful carriage of the head and trunk; a broad, deep and capacious chest in which the heart and lungs, developed to their normal size and strength, shall have free, full and regular play; square shoulders; a straight back; fully-developed and well-rounded limbs and the power to execute with ease, precision, and economy of force, such movements as are involved in the simpler exercises of strength, speed, and skill, and in ordinary gymnastic and athletic feats.

In the preceding pages I have endeavored to give a connected account of the principal events which have signalized the history of physical education in the United States and to suggest some of its relations to educational movement, that have occurred along other lines. The limits of a report forbid my undertaking to compare the origin and course of physical training in this country with similar phenomena of our own time and of times past in Europe. We are treading in much the same paths that have been opened elsewhere, and such a comparison might serve as a useful means of guidance and in showing the full extent of our indebtedness to foreign impulse and example. But the lessons that may be derived from our survey of the attempts and achievements in our own country and city are sufficiently numerous and distinct to throw much light upon our present needs and upon the most hopeful course of procedure for the future. The wisdom of our plans, and the success of our endeavors to make physical training a thorough-going, genuine, and enduring part of our public school course of instruction, will depend, very largely as it seems to me, upon the extent to which we appreciate those lessons and are guided by them.

The movements in the interest of physical education in which Boston has shown greatest activity are those falling within the periods 1825-28,1860-66, 1880 to the present time. For convenience of nomenclature these primary periods may be designated as the Round Hill or Beck period, the Lewis,

or light gymnastics period, and the Sargent, or gymnasium building period. Certain parallel or derived movements have also occurred; namely, that for the promotion of manual labor in special schools or as collegiate departments, which had its beginnings in the early twenties, and culminated in 1835 or thereabouts, when Mr. Theodore D. Weld's report - as agent of the "Society for Promoting Manual Labor in Literary Institutions" - was published; the movement for popularizing physiology and hygiene, 1830 to 1850; the German Turners' movement which, though it began so long ago as 1849, has assumed considerable proportions in the educational field, chiefly since 1885; the athletic movement, which is still flowing with full force, dates practically from 1870; and the present movement for the promotion of Swedish school gymnastics, whose beginning may be assigned to the year 1888. It is a noteworthy and significant fact that interest in physical training has become much diversified and comparatively definite and enlightened since 1860. This furnishes a ground for the hope that the time is at hand when what was an intermittent, inconstant interest will become a continuous and sustained interest. A comparison of the literature of the present with that of preceding periods favors the same view.

The Round Hill period was one in which the then undeveloped and ill understood Jahn gymnastics were enthusiastically adopted and baldly imitated. Drs. Beck, Follen, and Lieber were men of trained intelligence, but neither the general nor the professional public was prepared to afford them generous and sustained support as exponents of physical education. They were diverted into more attractive and remunerative fields, and no attempt was made to make good their loss either by securing trained talent from abroad, or by attempting to train up competent teachers in their stead.

The Lewis period was characterized by more of spontaneous activity than its predecessors. By reason of the measures which prepared the way for it, and the fact that the teachers and managers of public schools were aroused to action, a distinct advance was made towards making physical training an integral factor in public school and collegiate instruction. It was a period when an almost unquestioning reliance on home talent was the rule. It was characterized by rather crude methods, and by vague and uncritical views; since those most prominent at the time either ignored or scorned the lessons of German, French, and Swedish experience in the same field. It should not be forgotten that the idea which is becoming dominant at the present time, namely, that teachers of school gymnastics require special and adequate normal training, first took practical shape in institutions established for that purpose in the Lewis period. To my mind the distinctive characteristic of the present interest in physical training is to be found in the growing conviction that trained intelligence must be employed to supplement and re-enforce enlightened enthusiasm, and in the desire of the benefactors and governors of educational foundations to provide ways and means for developing and seconding such intelligence. Practical illustrations of this conviction and desire are to be found in the decisive steps recently taken by the Turnerbund to enlarge the scope and to increase the efficiency of its Seminar; in the establishment and expansion of the Boston Normal School of Gymnastics; in the multiplication of summer schools and all the year schools of gymnastics; in the establishment of physical training departments in our own Normal School and in other normal schools that have been named; in the recent vote of the Board of Supervisors of Boston to make physical training one of the elective subjects of examination open to aspirants to their higher grade certificates; and in the very recent announcement both by Cornell University and

Harvard University of four years' courses in physical training leading to the academic degrees of A.B., or B.S.

It is clear I think that physical training is assuming new dignity and proportions, that the whole question is passing into a new phase, and is destined to take on higher structural forms and to develop new powers and functions in the evolution of a better type of man upon the earth.

Respectfully submitted,

EDWARD MUSSEY HARTWELL,

Director of Physical Training.

DECEMBER 31, 1891.

IN SCHOOL COMMITTEE, BOSTON, Dec. 22, 1891.

Ordered, That eighteen hundred copies of the Annual Report of the Board of Supervisors be printed.

Attest:

PHINEAS BATES,

Secretary.

BOSTON PUBLIC SCHOOLS,

Superintendent's Office, Boston, Dec. 22, 1891.

To the President of the School Committee:

The Thirteenth Annual Report of the Board of Supervisors is herewith respectfully submitted.

EDWIN P. SEAVER,

Superintendent of Schools.

To the School Committee:

In accordance with a requirement of the Regulations, the Board of Supervisors has the honor of submitting the following report of its work for the year 1890-91:

REVISION OF THE COURSES OF STUDY.

The most important work, exclusive of the regular work of the Board of Supervisors, was the revision of the courses of study for the Grammar, High, and Latin Schools. The revision was made under the general direction and approval of the Committee on Revision. Fortunately, the course of study for the Primary Schools had been revised the year before; and the general plan for the revision of the Grammar-School course had been formed, reported, and adopted.

MORAL TRAINING.

The general changes in the courses of study relate to moral and to physical training. At the very beginning of the Primary-School and the Grammar-School course of study is the following note:

Teachers are directed to give instruction for a few minutes in good manners and good morals at the opening of school in the morning, and at other favorable opportunities. In giving this instruction, teachers should keep strictly within the bounds of manners and morals, and thus avoid all occasions for treating of or alluding to sectarian subjects.

Next to this note, in three of the courses of study, is the following extract from the General Statutes of Massachusetts:

It shall be the duty . . . of all preceptors and teachers of academies, and of all other instructors of youth, to exert their best endeavors to impress on the minds of children and youth committed to their care and instruction, the principles of piety and justice and a sacred regard to truth; love of their country, humanity, and universal benevolence; sobriety, industry, frugality; chastity, moderation, and temperance; and those other virtues which are the ornament of human society, and the basis upon which a republican constitution is founded.

Nor do these general requirements include all that directly relate to moral training. Under language, in the course of study for the Grammar Schools, are inserted, for the three lower classes, "Conversations on good manners and good morals;" and for the three upper classes, "Conversations and written exercises on good manners and good morals." The latter is also a requirement in the course of study for the three lower classes of the Latin Schools.

To him who regards high moral character and good manners as ends to be reached in the public schools only by direct moral instruction—through systematic lectures or homilies or the careful study of text-books treating of ethics—the requirements of the courses of study will probably seem meagre and trivial. But to him who recognizes how great is the moral influence of teachers, and how much habits of punctuality, regularity, industry, obedience, carefulness, and exactness—habits formed or strengthened at school—affect the moral character of boys and girls, the positive requirements of the courses of study with regard to moral training will seem sufficient.

It should not be forgotten that the regular and supplementary reading-books and the text-books in history contain

many a moral lesson — many an apt illustration of patriotism, heroism, and self-sacrifice. Nor is it of small moment that songs, full of beautiful, noble, or loyal sentiments are daily sung at school, and that some of the best prose and poetry is there studied, committed to memory, and recited. Moreover, the exercises of the Kindergarten and the manual training and observation lessons in the Primary and the Grammar Schools have furnished efficient methods not only of training the intellect, through eye and hand, but also of increasing the love for nature and for good, honest, and useful work, and of strengthening the will to do thoroughly and exactly the work required. Thus, in the ordinary routine of the class-room, the pupils' moral nature may be enriched and strengthened.

In addition to these incidental means of moral culture, the teacher, at the opening of the school in the morning, when the pupils' minds are fresh and active, is to read aloud passages from Holy Writ, and, in the interests of morals and manners, is to illustrate and enforce some moral truth by appealing to the hearts, the imagination, and the reason of his pupils. Nor is this all: There is a time in the sessions of the Grammar and Latin Schools, when pupils can converse with their teacher on morals and manners. Then prevailing faults in their conduct can be mentioned, and means of correction can be suggested; the homely truths and virtues upon which our government and the integrity of individuals stand, may be stated and illustrated; and the duties that the pupils owe to their school, to their home and neighborhood, to society, and to the State, may be noted and considered.

There are two questions that must be answered within a few years, if the general moral influence of our schools is to keep pace with the changes in methods of teaching: The first question is, What motives to study and to good conduct should be presented to pupils? Has not the time come for

the substitution of love for fear? of confidence for distrust? of natural emulation for forced and artificial rivalry? of ambition to make the most of one's self for satisfaction with passable results? of the desire of power to do good to others for power to acquire the best for one's self? The second question is, What standard of merit should be presented to pupils? Although this standard is changing for the better, it is in the main the standard that was inherited from college or university. The "first" or "head scholar" is often not the one that has struggled with difficulties and has gained the victory; not the one that has made the most of himself, although that may not be much except in the sight of the All-seeing One; but it is too often the one that possesses some natural gifts — a plausible manner, a ready memory, a quick wit, a limber tongue - superficial qualities that do not indicate strength of purpose or of character. If we must spend our time in measuring, then our standard should be such as will measure effort as well as results. It is unjust and cruel to give approval to natural brilliancy of intellect, and at the same time to withhold approval from persevering endeavor. If less time were given to measuring, and more time were used for interesting and inspiring pupils, for directing their energy, for finding what they can do best and for giving them opportunities to do their best, for extending to them needed help, and for encouraging them to meet and conquer difficulties, then our standards would be greatly improved, and would be used for the benefit not only of the superior but also of the average and inferior scholars. The intellectual results of such changes in motives and standards would, indeed, be great; but the moral results would be vastly greater.

PHYSICAL TRAINING.

As a counterpart to moral training stands physical training, for which provision is made in each of the four courses

of study. From the Kindergarten, where mind and body are beautifully and naturally trained together, through the Primary Schools, through the Grammar Schools, through the High or Latin Schools, and even through the Normal School, the pupils are to go with a growing feeling that the training of the body is as much a part of the regular school work as the study of language, literature, natural and physical science, and mathematics.

In the courses of study an attempt is made to secure favorable conditions for physical training. Thus recesses may be so connected with physical training as to make both the recess and the training of greater advantage to the pupils. The following note in the course of study for Primary Schools, will make the connection plain:

Physical training, including free play under the direction of the teacher, is a necessity in the Primary School. The time set apart for physical training and recesses must be so used as to meet the physical needs of the pupils. Consequently, recesses shall be given for withdrawals from the room, for the ventilation of class-rooms and for recreation. If for any reason recesses are shortened or omitted, the time for the same must be given to physical training.

When the school-yard is too small for free play or too much obstructed by snow and ice, or when the weather is bad and there is no place where the pupils may freely play, they must give, in the school-house, the time of recess to physical training. Thus, in the Primary Schools, physical training is both a regular requirement and an occasional substitute for free play.

A note, similar to the one quoted above, is inserted in the course of study for the Grammar Schools. But there is one marked difference. Free play — however desirable it may be — is not recognized as a necessity in the Grammar Schools. Indeed, the smallness of most of the school-yards, the ugliness of their surroundings, the brick or concrete "play-grounds," where accidents and troubles abound, almost

preclude a genuine old-fashioned recess. Imagine from three hundred to seven hundred pupils trying to run, romp, play ball and other games in an ordinary school yard! It is unnecessary to describe the results of such a trial. It was, therefore, wisely planned that, in the Grammar Schools, a short recess should be given for withdrawing from the room, for ventilating the class-rooms, and for recreation; but that the main dependence for rest and change should be secured by means of exercises for physical training.

It was fortunate for the initiation of this change that the Ling system of physical training had been authorized. Even after a short trial, there are unmistakable signs that the bearing and carriage of the pupils and their general health and strength have been improved by the admirably arranged and conducted exercises of the Swedish gymnastics. Most of the principals of our schools and many of their assistants already recognize the relative importance of physical training; and but a few years will have passed before every Boston public school teacher — except in schools where the departmental plan of work prevails — will feel that he or she must be as well qualified to conduct exercises in gymnastics as exercises in language.

After the Swedish system of gymnastics shall have been established in the Primary and Grammar Schools, it will naturally become, in its more complex forms, a necessary means of physical training in the High and Latin Schools. Already, the girls in some of the High Schools have received a part of this systematic training; and it is expected that, after physical training shall have become one of the "elective" subjects of the examination for High School teachers' certificates, skilful instructors of the Ling system may become regular teachers in the High Schools. Such teachers could be used for training both boys and girls; nor, if scientific military drill be rightly connected with and related to the Swedish gymnastics, need there be any fear that

the regular instruction in gymnastics will not include instruction in military drill. Dr. Hartwell and General Moore can so change, if need be, the relation of military drill to gymnastics as to make the former either an integral part of the latter, or at least a special application of the principles of physical training.

To reach the ends toward which the courses of study lead and at which the director of physical training and his assistant are helping the teachers arrive, it is desirable (1) to require all that are teaching or that are going to teach regularly in the Primary and Grammar Schools to qualify themselves to conduct the Ling gymnastics; (2) to employ, in the High and Latin Schools, as regular teachers, some that are competent to conduct the exercises for physical training; (3) to require boys in the High Schools to give to gymnastics a part of the time assigned to physical training; and (4) to recommend that girls wear in school such dresses as will enable them to receive the full benefit of physical training.

MANUAL TRAINING.

For the first time, the term *Manual Training* appears in the course of study for the Boston public schools. It marks in this city an era in educational ends and means. The way had been prepared by many scattered and miscellaneous experiments, and by some rational, systematic, and successful work. Moreover, penmanship, drawing, and sewing — manual arts — had held honored places in previous courses of study. Growing naturally from the gifts and occupations of the Kindergarten, manual training extends upward into the Primary Schools, where it takes the form of claymodelling, paper-folding and cutting, sewing in colored threads, and light cardboard constructive work.

Naturally and intimately united with this manual training, on the one side, is observation (1) of color, form, size, and prominent qualities of objects; and (2) of plants and

animals; and on the other side, is the drawing of the forms of the very objects that the pupils have observed and made. In letters of gold should be printed the words of the Director of Drawing which introduce the Primary-School course of study in drawing: "All drawing should be the expression of facts that the pupils have been led by their teacher to observe in solid forms." Thus, at the very time when the senses, the imagination, and the curiosity of children are very active, when their whole nature is a hunger and a thirst, when impression demands expression, and when head, heart, and hand coöperate, the pupils of the Primary Schools are set to observing, doing, and representing that which nature and the God of nature meant they should be familiar with, and which educates and cultivates their minds and hearts.

The spontaneous activity of pupils in doing interesting and definite manual work changes gradually into volitional activity. Effort becomes associated with conscious power to achieve, and achievement inspires to greater effort and to higher achievement. One reason why more is not accomplished in ordinary school studies is that the energy of pupils is not aroused, or, if aroused, is often misdirected and scattered. Manual training, united with observation, presents a definite object to be accomplished and definite instruments and methods of accomplishing it; and enlists the feelings, calls forth and directs the energy, gives strength and persistency to the will, and produces results that the pupils themselves appreciate.

Although manual efficiency is not identical with mental efficiency, yet the method of the one is the same as the method of the other, and the former tends to produce or to increase the latter. It is for this reason that we are justified in believing that manual training, if conducted with right ends and methods, will cause our pupils to accomplish in other studies and exercises more in a given time than they have been accustomed to accomplish. It is appalling

when we consider the immense amount of time that is wasted either by inattention or by attending to and committing to memory what is obscure or unintelligible. Manual training is at least a partial corrective of this waste; for it helps form a habit of mind that demands clear and distinct objects to work for, that uses right and efficient means of working for them, and that is satisfied with accomplishing only real results.

The course in manual training for the Grammar Schools includes sewing, light tool-work, or clay-modelling for classes VI., V., and IV.; cookery, carpentry, or clay-modelling for classes III. and II.; and draughting and cutting, carpentry, or clay-modelling for Class I. The following notes give important limitations:

NOTE 1: All the girls in Classes VI., V., and IV. are to spend two hours a week in sewing. If, however, any girl shall have passed a satisfactory examination in sewing, she will be allowed to substitute for it some other branch of manual training.

Note 2: Every girl is to pursue a course of twenty lessons of two hours each in cookery, as a regular part of the work either of Class III. or of Class II. But a girl who shall have passed a satisfactory examination in cookery will be allowed to substitute for it some other branch of manual training.

NOTE 3: If the whole or a part of the time assigned to specified branches of manual training be not used therefor, such time may be given to any other of its authorized branches.

The plan in sewing for the three lower classes has been in successful operation for years; but now sewing has, in the revised course of study, time set apart for itself — time not appropriated to other studies. This important change gives sewing a better opportunity than it ever had in the Boston public schools. Formerly, it seemed to live by pilfering time from other exercises; now it has rights of its own that must be respected.

The time has come for making improvements in the ends and methods of teaching sewing. Economy demands a

better classification of work, and more work with classes and less with individuals. Moreover, the teachers of sewing must take rank with at least the average of the regular teachers. The notion that a teacher of sewing, provided she is skilful in the art of sewing, need not be well educated, is going to the shades where it belongs. It is desirable that pupils who show in the Grammar Schools decided skill and taste in sewing should be encouraged to pursue a High-School course of study, and, after graduation, should be specially trained to teach sewing. These might then be employed as apprentices to some of our excellent sewing teachers. If Boston can afford to spend a large sum of money to train girls to teach language, geography, and arithmetic, why may it not afford to train a few girls to become excellent teachers of sewing?

A plan of work in clay-modelling for our Grammar-School pupils has not yet been adopted. It is expected that proper training in modelling will strengthen the observational and executive powers, will cultivate the æsthetic sense, and will give vigor and method to drawing and efficient means of illustration to geography.

Plans for light tool-work, for carpentry, and for cookery have been formed and successfully tried. It is expected that schools will be so organized and conducted as to give to every boy training in wood-working, and to every girl training in cookery. Nor will it be impossible for some boys to add skill in cookery, and for some girls to add skill in wood-working, to their other accomplishments.

It requires but a moment's reflection to be convinced that manual training cannot do its perfect work (1) unless provision be made for supplying in the future well-trained and skilful teachers of manual training; (2) unless a carefully prepared plan of work, properly related to the other work of the school, be formed and executed; (3) unless the materials and the instruments furnished be satisfactory;

and (4) unless the limits of time assigned to manual training be strictly observed.

The last statement is more important than it at first thought seems. The time that was taken from other subjects and given to manual training will probably so increase the working-power in the other subjects as to conpensate for the diminished time. But those other studies now need all the time that is assigned to them. To trench upon that is to challenge opposition. If circumstances require that pupils of some classes spend in manual training the three hours, instead of two, of a forenoon each week, then the lessons in manual training should cease as soon as the aggregate time — about eighty-two hours a year — has been spent.

Perhaps the time is soon to come, if it has not already come, to consider the question whether the daily session of the Grammar Schools for at least a part of the year may be lengthened a half hour without physical injury to the pupils, and with some decided mental gain. It must be remembered that most of the school exercises are pleasurable. Singing, drawing, physical and manual training, elementary science when inductively studied, and much of the work in language, history, and literature, interest and attract the pupils without appreciably lessening their mental or physical energy. Even arithmetic, the one study that used to require concentration, will soon, if the so-called reformers have their way, become an interesting language exercise, with an attachment of ciphering in the four fundamental rules and in fractions reduced to their lowest terms. Nor should it be forgotten that fear of punishment and that anxiety or worriment caused by ambition to gain high rank, "credits," and prizes have greatly diminished. For the present, at least, there is no danger that pupils' minds will be overweighted with either facts or thoughts; and there are but occasional indications that the golden age of study - sure to come in time - is near,

when pupils will spontaneously give themselves to hard study because it is good and useful study. Under present conditions, therefore, it would be safe to add a half hour every school-day or an hour on each of two or three days of the week to the five hours a day now spent at school. A part of this additional time could be profitably used for manual and physical training.

Manual training in the High Schools is at present confined to drawing, which is a required study in the first two years of the course, an elective substitute for chemistry in the third year, and one of the fourteen elective subjects in the fourth year. Thus drawing has won for itself an honorable place in the course of study. It is no longer called, except by the ignorant, "a merely ornamental study;" but is recognized as a study, possessing not only great educational value but also great practical utility. What, for example, can express more concisely, accurately, and beautifully, facts of form, of relative size, and of distinguishing differences than a completed drawing? The practised eye gathers from it at a glance what pages of words would but poorly describe. Indeed, drawing has become a necessity in some of the useful arts and, in general, an efficient means of educating the observational powers, the imagination, and the taste.

It seems passing strange that in the course of study for the two Latin Schools there is no requirement for manual training, except penmanship and the drawing that is incidental to the right study of geography, botany, physics, and geometry. The requirements for admission to college are at present such as to exclude even drawing as a regular study from the Latin Schools. It may not be out of place to suggest to college officers, who have been of late years very generous in their criticisms of the public schools, that a liberal education without manual training is incomplete. Indeed, college-bred men lack the efficiency that manual training gives, and especially the sense of proportion that

careful training in drawing cultivates. The most that the School Committee can now do in manual training for the pupils in the Latin Schools is to allow such of them as have the time and strength, to attend for a few hours of the week either the afternoon manual training-schools or the evening drawing-schools.

OBSERVATION LESSONS AND NATURAL AND PHYSICAL SCIENCE.

The changes in the course of study in observation and elementary science mainly consist in a rearrangement of the subjects and topics and in more closely connecting related subjects. The observation of nature, plants, and animals by pupils in the Primary Schools is closely followed - as has already been stated - by lessons in manual training; while drawing and oral and written language are used to express the results of observation and manual work. The child's fondness for animals, plants, and nature in its myriad forms, causes him to observe them attentively. He must see them in order to form clear and distinct conceptions of them and to receive their healthful influence. Words must be things to him; else the talks about the objects are wasteful. Models, pictures, or drawings of the objects must sometimes take the place of the objects themselves, but cannot fill the place. It is plain that teachers of Primary Schools who know the ends and means of observational work, who love and sympathize with nature and especially the child's nature, can, if they possess ordinary skill and are supplied with needed materials, give satisfactory observational lessons. The time has come for assuming that teachers have made general preparation for giving these lessons.

The work in observation begun in the Primary Schools is continued, under the name of elementary science, in the Grammar Schools. There are several distinct lines of science-work prescribed in the course of study. The first line of work is in physiology and hygiene. Beginning with simple

lessons in the Primary Schools, the study progresses gradually in the Grammar Schools through five years; and, even in the sixth year, hygienic duties must be considered. It is obvious that but a small part of human physiology¹ can be, or should be, studied objectively and inductively in the Grammar Schools. The results of the careful investigations made by physiologists with regard to the organs, their structure, functions, and health, must in great part be taken on trust, and must be gathered from text-books or lectures. This information, thus gained, is of little educational value, but is believed to be of great practical use. Indeed, the objective point of the study in the Primary, Grammar, and Latin Schools is health — how to preserve it, or, if impaired, how to restore it.

In the interests of health and morals, the following note is appended to the Grammar-School course of study in physiology and hygiene:

Each year of the Grammar-School course of study, teachers must give to their pupils instruction upon proper food and clothing, suitable exercise and rest, pure air, sufficient light, and temperance in eating and drinking. The attention of teachers is especially called to the requirements of the following law of this State: "Physiology and hygiene, which, in both divisions of the subject, shall include special instruction as to the effects of alcoholic drinks, stimulants, and narcotics on the human system, shall be taught as a regular branch of study to all pupils in all schools supported wholly or in part by public money, except special schools maintained solely for instruction in particular branches." In order to meet the requirements of this law, at least one-fourth of the time set apart each year for instruction in physiology and hygiene must be given to the explanation of "the effects of alcoholic drinks, stimulants, and narcotics on the human system."

This law of the State is referred to in the course of study for the Primary Schools, and is quoted in the introduction to the course of study for the High and the Latin Schools. The demands of the law should be directly and unequivocally

¹ The kind of observational work that pupils may do in physiology is indicated by Dr. II. P. Bowditch in his excellent *Hints for Teachers of Physiology*.

met by the teachers. It is the chosen way of the State to plant in the minds and hearts of our youth the principles of temperance, and to cause them to shun the evils that attend and follow intemperance. In order to cope with the hideous monster, drunkenness, that has ruined so many young men of good education and of noble instincts and character, and has levelled to the ground thousands of weaker youths, the State, desiring to protect itself, has declared that the public school must, in no uncertain tone, give the necessary warning and instruction.

Nor should teachers shrink from portraying to their pupils the evils that are caused by the use of tobacco in its various forms. It would astonish many of our citizens to learn how many boys in our schools use tobacco, and how many growing children—belonging even to the Primary Schools—habitually drink at home both tea and coffee. The robust, well-balanced, and steady-nerved American citizen will soon be a rarity, unless school, home, church, and society combine to prevent the physical degeneration that is sure to follow the habitual use of stimulants and narcotics by the young.

The second line of science-work prescribed in the course of study is in the direction of natural history. The observation of animals, plants, and minerals, begun in the Primary Schools, is to be continued in the Grammar Schools. Pupils are expected to study plant-life with the help of window-gardening or a school-garden; to collect specimens of grains, woods, pressed leaves, and wild flowers, and of some typical animals, plants, and minerals; and to learn the relation of mineral, vegetable, and animal products to arts, industries, and commerce. The third kind of science-work required by the course of study is the observation of physical phenomena, and, in the sixth year of the Grammar-school course, some observational and experimental study of physics, as such.

The educational value of the second and third lines of science-work in the Grammar Schools must be great, provided the method of work is largely observational, inductive, and systematic. If the method be in great part deductive, although illustrated by examples or experiments, or if the subject be presented inductively in the hap-hazard style, the sooner the time be used for other purposes the better will it be for the pupils. Nature cooperates with teachers of natural history and physics who have fondly and carefully studied these subjects, who present to their pupils in an orderly manner objects and phenomena for observation and inference, and who lead pupils, if need be, to test and correct their own observations and inferences. Such teachers rouse enthusiasm; for they, their method, and the subjects attract pupils. The products of such study are not only genuine delight, but also spontaneous concentration, rich stores of facts and truths, a habit of keeping the senses alert and the mind active whether at school or elsewhere, and mental preparation for investigation.

In the High Schools botany is studied in the last four months of the first year, and zoölogy, with an attachment of physiology, is an elective substitute for book-keeping in the second year. In the third year physics is a required study, and chemistry—as has already been mentioned—is an elective substitute for drawing. In the fourth year chemistry, physics, and astronomy are among the fourteen elective subjects. In the late revision of the High-School course, solid geometry, for which drawing had been an elective substitute, was transferred from the third-year to the fourth-year course. This change gave the desired opportunity for lessening the required work in physical science (physics and chemistry), to which nearly one-fourth of the school time during the third year had been given. This change was effected by making drawing an elective substitute for chemistry.

In the Latin-School course of study the science-work,

except in physiology and astronomical geography, is confined to the inductive study of botany for a short time in the second and third years, and to the inductive and experimental study of physics in the sixth year.

The time given to science-work in the first two years of the High-School course, and in the first five years of the Latin-School course, must be considered too short by those who know the comparative value of science-study; but there seems to be no way of finding more time for it without lengthening the daily session of school, or introducing the election of studies earlier in the course, or extending the course of study over more years. This extension, it is believed, would not now be approved by the public; but it would not be unreasonable to lengthen the daily session of school a half-hour, or to allow a wider choice of studies in such schools as could furnish classes of ordinary size.

LANGUAGE, GRAMMAR, AND LITERATURE.

English.

No radical changes in the course of study in language for the Primary and Grammar Schools have been made since 1878, when the Board of Supervisors laid out a new course of study. The changes in the lately revised course in language are chiefly in details that need not be mentioned. The principles underlying the course are the same as they have been for the last thirteen years. The most important of these are the following: (1) The "material" for exercises in expression should be gathered by the pupils, with the help of their teachers, from experience and observation; from real and imaginary scenes and from pictures; from their own thoughts upon subjects within their mental range; from reading, regular and supplementary; from prose and poetry committed to memory; from history, geography, and elementary science; and even from arithmetic. Indeed, language is omnivorous; it is constantly crying, "Give, give." (2) Exercises in oral expression should precede, and, in the earlier stages of training, should introduce, exercises in written expression. (3) Exercises for cultivating correct expression, whether oral or written, should be simple, intelligible, and interesting. (4) Copying, writing from dictation or from memory, composition, and correction, or criticism, are the normal means of forming right habits of written expression. (5) Pupils that enter the Primary Schools at five years of age should, as a rule, study language at least six years before they begin the study of formal grammar. (6) (a) Training in hand-writing, or penmanship, should be begun as soon as pupils enter the Primary Schools, and should be continued until they can write legibly, easily, and, at least, in good form. (b) Hand-writing is for use and not for ornament. (7) The main purpose of oral or silent reading is the acquisition of thoughts or sentiments from productions in script or print. A subordinate purpose of oral reading is the communication of thoughts or sentiments to listeners. Although the second purpose implies the first, yet, as effective oral reading largely depends upon its elocutionary properties, some time must, as a rule, be given to the cultivation and regulation of the voice. (8) A part of the reading should be collateral to the studies pursued; a part should be easy for reading at sight, and so interesting as to attract the dull and indifferent; a part should demand study and thought, should fill the mind with beautiful and noble sentiments, and should cultivate the imagination and taste. (9) As reading is the instrument that must be used in every study whose matter is expressed by written or printed words, every pupil should be trained to gather the facts and to grasp the thoughts expressed. (10) Some of the best prose and poetry, suited to the age and capacities of the pupils, should be committed to memory and recited.

^t The Board of Supervisors adopted, in 1878, the proposition of Prof. Benj. F. Tweed, Supervisor of Schools, that the study of English grammar, should be begun by the fourth-year classes, instead of the first-year classes, of the Grammar Schools.

A good beginning has been made in furnishing the Primary and Grammar Schools with suitable supplementary reading-books, both "circulating" and "collateral." It is true, however, that the supply of books which are to remain permanently in the school-house should be greatly increased — such books as can be read when they are most needed. They should be easily accessible; indeed, teachers and pupils, upon whose time there are many and exacting demands, should not be compelled to wait for the slowly-circulating books.

Lately, a much-needed change has been made in the interests of good and permanent reading for pupils in the Primary and Grammar Schools — a change similar to the one made in the Boys' Latin School fifteen years ago: Beside the regular reader for the first classes in the Grammar Schools has been placed as a text-book Masterpieces of American Literature; and for the first classes in the Primary Schools has been authorized for use as permanent supplementary reading The Book of Fables. This change heralds the day, it is hoped, when pupils shall read whole productions that possess high literary merit, instead of reading either "pieces" or "bits" from good authors, or productions that are poor both in thought and in style and that leave the mind empty and listless.

In the High-School course of study in English language and literature, no change was made except to provide that one hour a week be given to that study by the first-year pupils during the few months that they are studying botany. Formerly, there was no study of English during that time. In the fourth year, the study of rhetoric and composition is required for three hours a week; and English literature is one of the fourteen electives. The requirement in English was made in order to secure additional study of and practice in English composition — an exercise needed by all the fourth-year pupils, whatever be their electives.

Some change should be made in the course of reading in the High Schools, if the Masterpieces of American Literature be carefully read in the Grammar Schools. It is obvious that pupils who have read in the Grammar Schools Snow-Bound, Evangeline, and The Vision of Sir Launfal should not read and study these productions in the High Schools.

In the course of study for the Latin Schools, English is regarded as an all-important subject. The revised course of study emphasizes this importance. Three classes of exercises are prescribed, viz.: (1) Reading aloud or silently certain standard productions suited to the age and capacity of the class, lives of famous persons, and descriptions of prominent historical events; and the recitation of standard prose and poetry, with some elocutionary exercises. (2) Oral and written reproductions or abstracts of what the pupils have read, and of conversations and lectures; and compositions upon subjects within the experience and mental range of the pupils. (3) Exercises in penmanship, spelling, punctuation, and forms of written composition; in English grammar; in the applications of the principles of good English to the correction of mistakes made by the pupils in speaking and writing; and, during the last two years of the course, in critically studying some standard English prose as to correctness, propriety, perspicuity, and force.

The purpose and the spirit of the study of English in the Latin Schools are indicated by the following notes:

Teachers should recommend for home reading suitable books that may be taken from the school or from the Public Library. Pieces should be committed to memory and recited, not chiefly for the purpose of "declamation," — however valuable that may be, — but for the purpose of filling the mind with good thoughts and beautiful and noble sentiments, and of expressing these in a clear and distinct voice and in a simple and suitable manner. (Note under Classes VI. and V.)

The pupils are now old enough to begin to appreciate literature as such. The purpose and spirit of the author and the merits of his thought and style should be pointed out. His defects should be but lightly touched. (Note under Classes IV. and III.)

The course of study in English literature for Classes I. and II. is largely determined by the requirements for admission to New England colleges. ¹These requirements in English literature for the years 1892, 1893, and 1894 are given on the next page. Of course, the authors there mentioned should be mainly studied for their literature. If the pupils will but read with a genuine interest and with a fair appreciation of thought and sentiment, not only will their standard of reading and thinking be raised and their literary taste improved, but also their ability to use good English will be increased. Merits rather than defects in the exercises used for improving the style of expression should be emphasized. Indeed, if pupils do not violate the principles of good use, they will not need to correct the solecisms and barbarisms of others; and if, on the other hand, they use bad English, it will be sufficient for them to correct their own mistakes and blunders.

It is high time for the faculties of New England colleges to reconsider the question whether it is desirable to require at the entrance examinations the correction of bad English. This requirement has caused pupils to spend much time in turning English that is utterly bad, and that would never be used except by a few pupils, into such English as would pass muster under the critical eye of the drill-master. Fortunately, the thoughts expressed by the English have usually been as shallow as the English has been bad. The exercise consists of an attempt to dress a scarecrow as if it were a man. The result need not be pictured; but the pupils, who laughed at the original and who congratulated themselves on their escape from such barbarism, find themselves unconsciously dressing their thoughts in the torn and tattered and ungainly garments which they had derided, and for which they had substituted a respectable dress.

It has been affirmed that the colleges adopted the correction of bad English as a compromise between the friends and foes of formal English grammar, with its "parsing" and "analysis," its etymology, syntax, and prosody. The

¹These requirements, mentioned in the course of study, include the reading of certain productions of Shakespeare, Scott, Longfellow, Addison, Macaulay, Webster, Emerson, Irving, George Eliot, Dickens, and Hawthorte.

exercise of correcting bad English may be the lesser of the two evils; but neither of them should be tolerated, except so far as they help pupils to understand the English language and to use it correctly, properly, clearly, or forcibly. Neither the old nor the new method of teaching French, German, Latin, or Greek includes the correction of others' mistakes and blunders. It was and is deemed sufficient to apply the principles of the language in correcting one's own errors, and to become familiar with the best standards suited to the age and capacity of the learners—a familiarity that not only lessens the liability to error, but also increases the power of correction.

Foreign Language.

No foreign language has ever been studied in our Primary and Grammar Schools. Indeed, the question has never been seriously considered by any of the Boston School Committees whether it is desirable for pupils to begin the study of French or German or Latin in the Elementary Schools; and, if desirable, whether it is practicable. It is a solid fact that the present Primary and Grammar-School programmes of study are full. In order to save time for additional work, the present studies must be confined to narrower limits; their respective objects must be much more clearly and distinctly defined; related subjects and topics must be studied and taught both in their intimate and in their remote relations; and every subject in the present programme must be presented with the best methods and with a high degree of skill. It is unnecessary to state that, in order to save time in these ways, some radical changes changes that "Rules and Regulations" and "Orders" cannot make - must be gradually effected. At present, therefore, it does not seem practicable to add the study of a foreign language to the already-crowded Grammar-School programme.

But it may be pertinently asked, Would it not be practicable to allow a limited choice of studies in the last three years of the Grammar-School course and to make a foreign language one of these studies? If the number of schoolrooms and the number of teachers in the Grammar Schools were considerably increased and if skilful teachers of foreign languages were secured, it would, probably, be practicable to make this radical change. But changing the construction of school-houses and employing additional teachers, especially teachers of foreign languages, would greatly increase school expenses. It would, moreover, be difficult in spite of the law of demand and supply - to find many excellent teachers of foreign languages. Even in Boston, where Latin has been taught boys since the days of "our brother Philemon Pormort," and notwithstanding the great improvements made in the method of teaching Latin to older pupils, it has been difficult to find instructors that can teach Latin skilfully and efficiently to the younger pupils. No Gradgrind, mechanical method will do with them. Their instructors must have not only good scholarship in Latin, but also great teaching ability, skill, tact, and sympathy; must not — in the words of Milton — "force the empty wits of children" nor leave them "on grammatic flats and shallows where they" stick "unreasonably to learn a few words with lamentable construction;" but must "point out the right path of a virtuous and noble education; laborious, indeed, at the first ascent, but else so smooth, so green, so full of goodly prospect, and melodious sounds on every side, that the harp of Orpheus was not more charming."

It would be even more difficult to find a large number of excellent teachers of French and German than excellent teachers of Latin. This difficulty might, in time, be met, if the departmental plan of teaching were introduced into the three upper classes of the Grammar Schools. This change in organization would be of immense advantage to the

schools, if only able instructors were placed in charge of the departments. There is no doubt that skill, even to the degree of expertness, could be acquired by a teacher who had received a good general training, and who then, following his bent, devoted his time and energy to one department of study and teaching. The plan of requiring one instructor to teach all the subjects of study pursued by one class in one year, results usually in scattering his energy and sometimes in expending it on subjects that he, either by nature or by lack of training, is not qualified to teach. Think, too, of the waste of a pupil's time, who, in six years, is under, at least, six different teachers of penmanship, no one of whom may be expert in teaching that subject. waste is likely to be especially great in drawing, in singing, in elocutionary reading, and in a part of the subjects of elementary science; nor, in some schools, is the waste small in geography, history, and arithmetic.

Until the departmental plan of teaching the upper classes in the Grammar Schools be adopted, it will probably be impracticable to introduce into them the study of foreign languages. Whether the introduction of this study would be desirable need not now be considered. The educational demands of the present are, however, so different from those of even our grandfathers' time that it may not be sufficient for Boston to allow boys and girls of eleven, after examination, to enter the Latin Schools, and then and there to begin Latin, and two years later to begin French or Germa.n Preparation for admission to college is thus wisely begun; but may not the demands of a general education or the preparation for special callings make it desirable for other pupils than those who are preparing for college, to begin early the study of a foreign language? This question will require an answer within a few years.

In the High-School course of study in foreign languages, no important change was made. A pupil regularly studies

French, or German, or Latin during the first two years, and, during the third year, either continues that study or "dropping" it, begins the study of French, or German, or phonography. In the fourth year, French, German, and Latin are among the fourteen electives. The department of French and German has been greatly improved under the supervision of its Director. His plan and method of work, printed in School Document No. 13, 1891, have been of great value to the teachers.

In the course of study for the Latin Schools, provision is made for studying Latin six years; French or German three years, viz.: the third, fourth, and fifth; and Greek, the last three years of the course. One marked feature of the Primary, Grammar, and Latin-School courses of study, in the different subjects, may be aptly illustrated by the course of study in French or German. That feature is the union of method with subject. The course of study prescribes not only what is to be done, but also how, in a general way, it is to be done. The very difficulty of separating the two, and the necessity of uniting them in order to reach intelligently and expeditiously the ends of study, indicate plainly that the antiquated notion — probably imported from Europe - that a course of study should be confined to mentioning subjects in logical order, is false, or - to use the hideous term that is coming into good use — unpedagogical. requirements for beginners in French or German are the following:

French or German: Three and one-half hours a week. 1. (a) Translating into English, reading aloud, and, immediately after the teacher, repeating aloud, easy French or German. (b) Simple exercises in pronunciation and conversation based on this French or German. (c) Unprepared translation of easy French or German into English. 2. (a) Oral and written practice in the forms and use of nouns, pronouns, adjectives, articles, regular verbs, and at least twenty irregular verbs. 3. Simple oral and written translations of English into French or German.

Note: Pupils should, with the help of the teacher, read, at the outset, French or German, and translate it into English. They should be trained to observe forms and idioms and the force of these; and thus should acquire some real knowledge of the foreign language before they begin to study its formal grammar.

"Although," it might be said, "this course in French or German seems reasonable, yet by prescribing the method you are interfering with the independence of the teacher; you are preventing him from using his good judgment in adapting means to ends; and, as the science of education progresses, you are keeping him from applying the new thought to and from casting the new light upon his methods of instruction." So far as Boston is concerned, a sufficient response to these objections is that no teacher who is convinced that his is a better method than the prescribed, and who can give a good reason for the faith that is in him, is ever prevented from trying the same. The prescribed method is intended to be the best — a method founded upon solid principles and upon the teachings of experience. It interferes only with those teachers that are slaves of custom or prejudice; that use, not their own judgment, but their ancestors'; that, from inertia, do not study the signs of the times, nor seek through reading and investigation the best methods of instruction. Moreover, the subjects and the order of subjects are changing with the methods of instruction. If there is danger that lurks in the latter, it also lurks in the former. To be consistent, whoever objects to prescribing methods should also object to prescribing subjects. The safe way is to prescribe both as parts of a whole, and, whenever there is need, to change both.

Some of the objects and the prescribed method of studying foreign languages in the Latin Schools are indicated by the following notes:

(1) To translate readily French or German into idiomatic English, and (2) to acquire and appreciate the author's thoughts through *reading* the foreign language without *translating* it into English, are the two

main objects of its study in the Latin Schools. While accomplishing these objects, the pupil should acquire a correct pronunciation and a familiarity with forms and syntax, and should begin to compose and converse in the foreign language. (Note under Class II.)

Beginners in Latin should hear much easy Latin read and translated and should read aloud the same or similar passages and translate them into English so that Latin words, the changes in their forms, and the force of these changes, may become familiar. A few Latin words should be added each day to the vocabulary of the pupils. (Note under Class VI.)

Pupils should be induced to translate much Latin into English. To this end the teacher should occasionally translate and comment upon the more difficult passages; should cause the brighter pupils to translate at sight average passages, and the average pupils to translate at sight the easier passages, and should skilfully remove the difficulties that obstruct the way of the duller pupils. (Note under Class IV.)

That pupils may, early in the course, acquire some knowledge of the Greek language as a foundation for their study of its formal grammar, they should read aloud and should hear the teacher read much connected Greek and should, with his help, translate it into English. They would thus gradually learn, through ear and eye, changes in the forms of words and, through the understanding, the force of these changes; and, at the same time, interest in the connected narrative would gain daily in the power of translating readily Greek into English. (Note under Class III.)

The productions of Latin and Greek authors should now be read and interpreted as literature. However valuable the study of Latin and Greek grammar may be made, it should be kept strictly subordinated to the study of the Latin and Greek literature read. (Note under Class I.)

GEOGRAPHY.

Geography has never been regularly studied in the Boston Primary Schools. Some simple exercises given there on distance and direction, including the points of the compass, and some observation of common physical phenomena and of the more marked properties of animals, plants, and minerals, have served as an introduction to the regular study of geography in the Grammar Schools. In these—according to the revised course of study—geography is studied for five years instead of five and a half years, as formerly. The

work for the first two years is in some respects different from what it was, and the whole course is somewhat shorter; moreover, provision is made for reading physical geography in the sixth year.

The changes made in the course of study in geography do not mean that geography is losing its place as one of the most useful and culture-giving studies: they mean only that the essentials of geography can be acquired in five years of study. It is certain that if the purpose and spirit of Miss Crocker's, and of her successor's, teachings be the guide, geography will be freed—as it has been in very many classes—from petty and unimportant details, will do the work it was intended to do, and will reach its deserved prominence.

Geography is not studied in the High Schools, except in its relation to history. In the Latin Schools, it is regularly studied the first two years of the course; and in the third year a little time is given to the reading and study of physical and astronomical geography. Some attention is also given to geography in its relation to American, English, Grecian, and Roman history.

HISTORY AND CIVIL GOVERNMENT.

Although it is a prevailing theory that the reading of biography is the best introduction to the study of history, and although the doctrine that the inductive is the right method of teaching has met general acceptance among "educators," yet no stories of famous men and women and no lives of heroes have been regularly read by the first classes of the Primary Schools, nor — if we except some stories from American history — by the three lower classes of the Grammar Schools; moreover, the pupils of these classes and of the lower classes of the Latin Schools have not, with rare exceptions, been induced by their teachers to visit historic places, buildings, and monuments in and about Boston. If

the same degree of skill and taste were used in writing for young people true stories and lives of historic persons as is used in writing fiction for them, there would be a large supply of such productions, clearly and simply written and adapted to the capacities and needs of the young. Truth is, indeed, stranger than fiction; and the true stories of the noblest and of the most useful persons in our history, if read by the younger pupils, would serve not only for interesting exercises in reading, but also for impressing on the minds and hearts of the young the useful lessons that history teaches and for introducing them early to the simple study of historical events.

In the spirit of the preceding remarks and with the hope that, before long, there will be a sufficient supply of suitable historical reading, the following requirements were made in the Grammar-School course of study for the three lower classes: (1) Reading stories from American history; (2) reading lives of persons famous in American history: (3) describing visits to historic places, buildings, and monuments in and about Boston. During the fourth and fifth vears in the Grammar Schools, American history is regularly studied, and English and other European history so far as it is connected with American history. There has been a growing conviction that pupils leave the Grammar Schools with too little solid knowledge of their country's history, and with little or no real knowledge of the government of their city, state, and nation. To find time for a systematic review of American history and for a substantial study of civil government, the time that had been given by the sixth-year class to geography and to readings from English history was taken. The present requirements for the sixth year are the following: (1) The civil government of the United States, of Massachusetts, and of Boston; (2) review of American history, including United States history, and also of its connection with English and other European

history; (3) reading lives of persons famous in English history.

Note: The study of civil government should be connected with the study of the history of the state and of the United States; and the actual workings of the city and the state government should be observed.

The High-School course in history and civil government, changed but little from what it was, is as follows: Ancient history in the first year; mediæval, in the second year; modern, in the latter part of the second year; modern, continued and completed, and civil government, in the third year. In the fourth year, history is one of the fourteen electives.

In the course of study for the Latin Schools, history is associated with English, because history furnishes excellent opportunities for oral and silent reading, and for oral and written reproductions or abstracts. The following are the requirements in history: In the first year, lives of persons famous in American history, its important events, and visits to historic places, buildings, and monuments in and about Boston; in the second year, lives of persons famous in English history and its important events; in the third year, Plutarch's Lives of Famous Greeks, and the great events in the history of Greece; in the fourth year, Plutarch's Lives of Famous Romans, Macaulay's Lays of Ancient Rome, and the great events in the history of Ancient Rome; in the fifth year, the great events in the history of Ancient Greece and Rome. The following notes indicate the purpose and method of historical reading and study in the Latin Schools:

The reading of history lessons should be accompanied and followed by collateral reading and by conversations upon prominent and interesting events. There should be, of course, no attempt to load the memory with unimportant facts and dates. The main purposes should be (1) to train the pupils to grasp mentally the leading events in their order, and (2) to induce or arouse an interest in historical reading. (Note under Class VI.)

Pupils in Class IV. are old enough to begin to appreciate causes and consequences of historical events, and to form clear conceptions of the life of the people whose history they are reading. Teachers should use statuary, paintings, engravings, photographs, and other available historic illustrations (at the Art Museum and elsewhere), and should read to the pupils, or cause them to read, such extracts from standard historical writers as distinctly and vividly portray famous men and events. (Note under Class IV.)

MATHEMATICS.

Arithmetic.

The course of study in arithmetic for the Primary Schools was not changed by the revision, except that an unnecessary note was omitted, and a half hour was added to the two hours a week formerly given to arithmetic by the first-year class.

The changes in the course of study in arithmetic for the Grammar Schools were made in order to limit the work in some directions and to extend it in others. No principle of the former course was violated, unless the following additional requirements were violations: The measuring of length, of rectangular surfaces, and of rectangular solids, by Class VI., Class V., and Class IV., respectively: the measuring of angles by Class II., and of the trapezoid, the pyramid, cone, and sphere, by Class I.; and the finding of the cube root of perfect third powers of simple integers, by Class I. Beside these possible offences must be placed the omission of an unnecessary note, and the adding of onequarter of an hour a week to the time formerly given to arithmetic by Class V., and half an hour a week to the time that used to be given by Class II. and Class I. The time assigned to arithmetic before revision was 15% of the whole school time, and now it is 16%.

The increase of 1% must not be looked upon as an act of

throwing meat to Cerberus in order to induce this monster to allow some of the condemned arithmetical subjects to withdraw from the shades whither they were consigned by the Board of Supervisors in 1878, and whither other subjects that deserved a longer life were sent a few years ago. Although, probably, the metric system, and, possibly, some practical subject in percentage, will, sooner or later, demand readmission to the course of study, yet the time for arithmetic was not increased in order to make room for these discarded subjects. The sole purpose of increasing the time 1% was to meet, in small part, the crying need of more time for intelligent and thoughtful study of the arithmetical subjects that the so-called reformers left in the former course of study.

"But why," it may be asked, "should the measuring of lines, surfaces, and solids be introduced into the course of study in arithmetic, and especially into the course for the lower classes?" The answer is plain: The units of long, square, and cubic measure are among the most useful in practical life, are included in all standard arithmetics, can be best taughtor rather learned—by actually measuring length and rectangular surfaces and solids, and are involved in problems whose solution requires exact numerical work. Now that the metric system is a thing of the past in the Boston Grammar and Primary Schools, one of the best subjects for intelligent, connected, and exact objective instruction is long, square, and cubic measure. Begun in the Kindergartens as the fundamental form and number study, it is continued in the Primary Schools within narrow limits (inch, foot, and yard as units of length). When, at no distant day, the Kindergartens and the Primary Schools shall have been united in purpose and method, measuring will become an essential part of and an important aid to the study of form and number in the Primary Schools. Nor will the change stop here. After paperfolding and cutting, sewing, modelling, drawing, and light

tool-work or carpentry shall have been properly related to each other, there will be evolved a systematic study of form—already named objective geometry—of which mensuration will be an essential part.

In the High Schools, according to the revised course of study, the individual facts of arithmetic may, in the first year and a half, be generalized and expressed in algebraic form, and the principles of algebra may be applied to the solution of arithmetical problems. Moreover, those pupils that elect book-keeping instead of zoölogy are required to study in the second year commercial arithmetic. In the third year arithmetic may be reviewed with algebra. As formerly, arithmetic is regularly studied the first year and the second year in the Latin Schools. In the third year, individual numerical facts are generalized and algebraically expressed; and in the fourth year, the principles of algebra are applied in the solution of arithmetical problems.

The course of study in arithmetic for the Primary and Grammar Schools contains only subjects with which a man of average intelligence should be familiar, and of which he is likely to make some practical use. Whether the present course of study in arithmetic contains all such subjects is still an open question, and was by no means settled a few years ago. One illustration will suffice: Pupils in the Kindergartens, four or five years old, become familiar with the cube; ten or eleven years later, they are graduated from the Grammar Schools without being required to find the length of the edge of a cube whose volume is given. The revised course of study has partly removed this absurdity by requiring pupils of the graduating classes of the Grammar Schools to find the cube root of perfect third powers of small integers.

Not only on the ground of practical utility and ordinary intelligence, but also on the ground of mental power, should all the subjects now in the course of study in arithmetic remain there. The argument that demonstrative reasoning is not the kind of reasoning that is used in practical life, and should, therefore, in school exercises, be reduced to a minimum, proves - if it proves anything - too much; for it applies as much to algebra and geometry as to arithmetic. But demonstrative reasoning does enter into the daily affairs of practical life. The day laborer in his calculations with regard to wages, food, and rent, and the manufacturer and the merchant in their large transactions, must obviously exercise their power of demonstrative reasoning. should it be supposed that pupils at school who are finding out for themselves numerical facts always work within the regions of certainty. If, for example, they seek to find how many blocks are six times five blocks, they must use the greatest care lest they make a mistake in their calculation; and this liability to mistake causes them to repeat the operation until the identity of results convinces them that the product is thirty blocks. Does this way of working differ much from the man's way of working, when he is engaged in the practical affairs of life - when he is giving his attention to what is possible or probable or near to certainty? Moreover, if pupils are told that a man earns fifteen dollars in three days and are asked how much at the same rate he can earn in six days, they not only use their knowledge of the numerical fact that six days are twice three days, but also exercise their common sense in judging that, in twice as many days, he can earn twice as much money.

So, too, in solving practical problems in written arithmetic, pupils are required to exercise their common sense. But a great delusion, a wide-spread fallacy that seems to have taken possession of college men especially, has caused the study of arithmetic to be regarded of little educational value. The fallacy arises from considering the study of arithmetic to be the study of numerical processes. An analysis of any practical problem in written arithmetic will

expose the fallacy: First, pupils decide what is the concrete end to be reached; second, they consider the conditions of the problem and determine by what numerical process they shall reach that end; thirdly, they "abstract" their minds from the conditions of the problem and the concrete terms used and give their attention to and perform the numerical process required; and, finally, they express the result in a concrete term. They cannot slight any one of these parts of the solution without endangering the result. Each part of the solution requires the exercise of attention, and, unless the kind of problem is familiar to them, the second part may require the exercise of a high degree of attention, while they are thinking of the means to be used for reaching the end. It is certain that the thoughtful consideration of the conditions of practical problems and the determination of the method of solving them give vigor and point to young minds, and cultivate the power of selecting means for accomplishing definite ends. Nor is the third part of the solution without a little educational value, inasmuch as it demands genuine abstraction and absolute accuracy; but the automatic action of the mind in ciphering the result of much previous repetition - is valuable chiefly as the means for reaching the end. When the exercise of ciphering is given by itself as an end, the pupils take little or no interest in it, and either are burdened by trying to give attention to what is empty and commonplace, or, yielding to their feelings, become careless of the numerical process and thus defeat the very purpose of the exercise. The less of such ciphering — in the opinion of the writer of this report - the better it is for the pupils; indeed, if arithmetic and ciphering were identical, the reformers would be right in reducing the exercises to a minimum.

It is plain that the interests of the pupils demand a careful consideration of all the subjects in the present course of study in arithmetic; that, to this end, just such practical

problems as and no more difficult ones than occur in real life, and as many problems as and no more than are needful to evolve, enforce, and fix in the mind the principles of each subject, should be solved by the pupils. Indeed, the study of arithmetic combines, in a very high degree, what is practically useful with what serves as a mental gymnastic. Can it be, then, that such a fruitful study is to be torn up by its roots and to be hacked and cut to pieces? Not certainly by him who has considered and who knows the real worth of the study. Such a crime against the best interests of our pupils might be ignorantly committed by one who in his youth had "memorized" numerical facts instead of finding them out for himself and intelligently using them until they were lodged in his memory; who had been forced to cipher aimlessly and drearily instead of thoughtfully solving useful problems; and who had fought a losing battle with such problems in circulating decimals, alligation medial and alternate, single and double fellowship and position, permutations and combinations, as adorned the pages of Pike's arithmetic or of the "mathematical text-book compiled by President Webber for the use of the University at Cambridge."

Algebra.

The course of study in algebra for the Latin Schools remains unchanged. It is regularly studied the third year, the fourth year, and a part of the fifth year. In the High-School course, a decided change was made: Instead of limiting the study of algebra to the first year, it is extended into the second year. Among the reasons for making this change were these: (1) The average pupils of the first-year class found algebra the most difficult study; and (2) classes were unable to complete elementary algebra in one year. In the course of study for the fourth-year class, advanced algebra is made one of the fourteen electives.

The proposition to introduce algebra into the Grammar-School course of study has never been officially considered by any of the Boston School Committees. It is obvious that algebra as now studied in the High Schools would present even to the brighter pupils of the first and second classes in the Grammar Schools so many and strange difficulties as to demand an exorbitant amount of school time — time that the pupils need and must have for the standard studies of the regular course. It is, therefore, out of the question to add algebra to the present Grammar-School course of study.

It has, however, been seriously proposed to substitute the study of algebra for the study of arithmetic in the upper classes of the Grammar Schools. At first thought, it seems reasonable to substitute one branch of mathematics for another branch; at least, the consideration of the question whether the study of mathematics be good mental discipline is thus postponed till algebra is completed and the college demands satisfied. The proposition, too, seems innocently to offer a more substantial feast to those who are hungering for mathematical food. The conundrums in single and double position and other difficult arithmetical problems whose solution used to strengthen and test the mental powers of our grandfathers have been withdrawn from the later text-books in arithmetic, and, in somewhat changed form, are now found in algebras. Grammar-School pupils who, three or four years ago, were in Primary Schools are to cope with these difficulties and with such as legitimately belong to algebra — with generalizing numerical facts and expressing the generalizations with the help of letters; with interpretations of a new and strange mathematical language; with mechanical processes long and intricate; with reasonings that demand concentration, patience, and thought. Indeed, the proposition seems to herald the day when pupils shall leave the unobstructed plains and struggle to scale the mountains.

It should not be forgotten, however, that the men who left

arithmetic out of the requirements for admission to college are the same as propose to take it from the upper classes of the Grammar Schools. It may not be unreasonable to doubt whether these college men are competent judges of what is best for Grammar-School pupils; at least, it would be the part of wisdom for the humble individuals who know the facts, and who are to be held responsible for making the change, to demand that the reformers' judgments, whether tinged or not with prejudice, should be supplemented by some convincing arguments, none of which have as yet been presented. The burden of proof must be placed on the shoulders of the reformers. They must present the comparative practical and educational values of arithmetic and algebra, and show that the values of the latter study are superior to or inclusive of the values of the former study.

In measuring the practical value of these studies, it should be kept in mind that certain subjects now studied by the upper classes in arithmetic cannot be treated algebraically; and, therefore, that such pupils as cannot enter High Schools will be deprived of valuable instruction. Again, in estimating the practical value of algebraic methods and formulas, it would be desirable for the reformers to appeal to their own experience in order to decide which of the two they use in the practical affairs of life—algebraic formulas or arithmetical principles. Perhaps they will discover that, except on rare occasions, they appeal directly to arithmetical principles, and that, whether they start with the one or the other, they can arrive at no practical result without the use of arithmetic.

It may be, therefore, that the reformers rest their case not upon the practical but upon the educational value of algebra as compared with that of arithmetic. If this be true, they must show that the pupils in the upper classes of Grammar Schools would receive more mental training from studying the general facts or truths of algebra, from performing operations with general terms, and from solving

problems involving general terms or a mixture of general and numerical terms, than the pupils now receive from studying particular numerical facts and generalizing the same, from solving particular arithmetical problems that involve definite numerical terms and that require particular analyses, and from evolving arithmetical principles from these analyses.

As the educational value of generalizing depends mainly upon a clear and distinct understanding of particulars and upon observing the similarities in these, the reformers must show that the general terms and formulas of algebra are arrived at by the pupils through the study of particulars. But the study of particulars is an arithmetical, not an algebraical study. If the pupils work with general terms and truths before the particulars are understood, they may acquire some mechanical accuracy and dexterity, and may even work out formulas that they can use in the solution of numerical problems; but the educational value of the. work — the mental gymnastic — is reduced to a minimum. Therefore, unless the reformers can change the nature of the youthful mind, the pupils of the upper classes in the Grammar Schools cannot profitably study for mental discipline algebraically those subjects which they have not already studied arithmetically. The exceptions to this rule prove its correctness.

It only remains now for the reformers to prove that the pupils of the upper classes would gain more mental power by studying such elementary subjects of algebra as correspond to the arithmetical subjects studied by the lower classes of the Grammar Schools than by studying the arithmetical subjects prescribed for the upper classes. After breaking up the unity of elementary algebra, the reformers should seize the golden opportunity offered them; the very difficulty of comparing the values of studying subjects that differ so much gives theory the appearance of truth and

reality. But, whatever be the opinion of theorists, they should consult the teachers of the upper classes of Grammar Schools and learn that pupils, although they have been in Grammar Schools three or four years, need to exercise their minds upon particular arithmetical facts and problems—upon what is real, clear, and distinct; that thus and only thus can these pupils hope to generalize facts correctly and to discover the principles involved. The reformers would thus learn that a too early study of algebra lessens the mental gymnastic that both arithmetic and algebra can give, and that a solid basis for algebra can only be laid after a thorough study of arithmetic.

Geometry and Trigonometry.

In the course of study for the Latin Schools, objective geometry is prescribed for the first two years. The requirement for the second year is "Objective geometry, including the mensuration of the parallelogram, triangle, trapezoid, trapezium, circle, and any other plane figure divisible into triangles; of the right prism, pyramid, cylinder, and cone; and of the sphere." The following note indicates, in general, the character of the exercises required:

Pupils are to observe, measure, and represent solids, surfaces, and lines, and to infer, express, and use simple geometrical truths.

As formerly, plane geometry is studied in the Latin Schools a part of the fifth year and in the sixth year. In the High Schools, plane geometry was formerly studied from the beginning of the second year and completed the same year; now, according to the revised course, it is begun about the middle of the second year after elementary algebra has been completed and is continued and completed the third year. This change causes solid geometry, formerly a third-year study, to be transferred to the fourth year, in which it is one

of the fourteen electives. Plane trigonometry (with its applications to surveying and navigation) and analytic geometry are also among the fourteen electives. It will be noticed that elementary algebra and plane geometry are studied in three years, instead of two years, as formerly. This seems a remarkable change in view of the fact that it is made at the time when educational experts propose that Grammar-School pupils begin algebra at twelve years of age and plane geometry at thirteen. If the reformers had proposed that objective geometry be studied in the lower schools, the proposition would have been received with favor; indeed, they would have found, had they made a thorough examination of courses of study and instruction, that a good beginning of geometrical study — as good as circumstances have permitted - had already been made. It is evident that as soon as drawing and other kinds of manual training shall have been properly related to one another and to the general study of form, there will be given a fine opportunity of organizing the study of objective geometry — an opportunity which it is hoped the educational experts will seize. It is plain that objective geometry would be, practically and educationally, one of the best studies for pupils in Primary and Grammar Schools; but experience certainly experience in the Boston Latin School for the last fifteen years - has taught that, until a careful plan for the study of objective geometry shall have been formed, the work in it, except in mensuration, will probably be miscellaneous and unsatisfactory.

It needs but little consideration in order to give a decisive answer to the question whether plane geometry as now studied in the High and Latin Schools can be profitably studied by thirteen-year old pupils in the Grammar Schools. Of course, plane geometry does not mean objective geometry; for the latter includes the study of solids as well as of surfaces, and, in its elements, solids before surfaces.

Moreover, objective geometry convinces through observation, measurements, experiments, and constructions; while plane geometry convinces, or rather gives absolute certainty, through mathematical demonstration. The method of objective geometry is mostly inductive; the method of plane geometry, mostly deductive. Nor does plane geometry mean geometry diluted with illustrations, or other devices — a kind of annex to objective geometry. Plane geometry, as a "substantial study," includes the mathematical demonstrations of theorems logically arranged. Although it is true that Grammar-School pupils can and should reason deductively, yet to follow closely and understandingly a chain of demonstrative reasoning, especially about what is unfamiliar, would require from them an unnatural, an herculean effort. The degree of concentration necessary to master the demonstrations would be likely to sap the mental energy and to break the will of thirteen-yearold pupils of average ability. Therefore, were there time for the study of plane geometry in the Grammar Schools and were it taught only by experts, to require it there would be — to speak mildly — unwise and improvident.

MUSIC.

Singing is an essential exercise in the Kindergartens, and, united with the games, gives to the teachers a natural, delightful, and efficient means of arousing and cultivating the moral nature of the pupils. In the other schools, singing does not play so important a part; yet it improves the moral condition of the pupils, softens their manners, makes school attractive, and gives in the most natural way a fund of song and verse that carry cheer and joy to many homes, and that afford the means of adding interest and charm to social intercourse.

The old course of study in music for the Primary and Grammar Schools was good for its day and generation, but was encumbered with references to text-books, and has, of late years — except in a small part of the schools — been followed neither in letter nor in spirit. For this course of study, the following note is substituted in the revised course:

Each special instructor of music will, under the direction of the Committee on Music, determine the topics, the order of topics, and the method of instruction within his own circuit of schools.

In the High Schools, singing is, as formerly, a regular study during the four years' course. In the Girls' Latin School, singing is a prescribed exercise and is given a part of the time assigned to gymnastics. In the course of study for the Boys' Latin School, singing is not mentioned. Before entering the school, most of the boys have practice in singing for at least six years. It would, of course, be highly desirable, especially for the lower classes, to continue the practice and not to leave it entirely to the interest and good-will of the boys, a few of whom form a choir for practice out of school.

As singing is no longer considered an "ornamental study," but one that has great moral, domestic, and social value, it may be desirable for college faculties to place singing among the elective subjects to be studied in preparation for admission. Plato's estimate of music as a means of education, and the place it held, in mediæval times, among the seven liberal arts, show that the suggestion is not unworthy of consideration. Nor in these times of upheaval in educational ideas, when there seems to be no recognized unit, ancient or modern, by which the value of studies may be measured, can we afford to slight the things of the spirit. The power of singing, the natural language of the spirit, should not be lessened by neglect; indeed, as Hegius said, "All learning is hurtful, when acquired with spiritual loss."

BOOK-KEEPING.

As formerly, book-keeping by single entry is studied for a short time by the first classes in the Grammar Schools. In the second year classes of the High Schools, book-keeping by double entry remains the elective substitute for zoölogy. The simple study of book-keeping in the Grammar Schools prepares pupils to keep family accounts correctly and gives them a useful knowledge of bills, notes, and checks. Occasionally a Grammar-School graduate keeps by single entry the books of some business concern. In the High Schools, the principles of book-keeping by double entry are thoroughly studied and regular sets of books are kept. Many of the pupils enter business houses, some of whom become assistant book-keepers and a few of whom take the entire charge of the books. Some, becoming partners in a business, do not keep the books, but from their knowledge of the principles of book-keeping are able to examine and approve the books of the concern.

There is not a shadow of a doubt that the simple knowledge of book-keeping acquired in the Grammar Schools is of extensive practical use. To doubt this would be like doubting the value of learning to write one's name. Whether the study has any educational value is a question not worthy of a moment's consideration; yet, on the ground that bookkeeping by single entry trains pupils to be exact, methodical, and systematic, could its educational value be proved. Book-keeping by double entry has been styled a "bread and butter study." This assertion, partly true, contradicts the assertion that the study is utterly useless. Although different kinds of business may demand different forms or methods of book-keeping, yet the same general principles underlie all methods. It is these principles that pupils study and that they apply by an approved method to one kind or to several kinds of business, and are thus enabled to apply to any kind

of business with whose peculiarities they have become familiar. Nor is it true that book-keeping by double entry is merely a "bread and butter study." It is much more. It is a study not only of forms, but also of principles — a study requiring close attention and thought. In applying these principles, pupils must be constantly on their guard against error, and if they make mistakes must learn to detect and correct these. It is also one of the best studies for training pupils to perform systematic work — a training that all pupils need. After closing a set of books, pupils have before them a system of accounts, with particulars classified, with classes arranged and brought into such unity as to convey at a glance the financial condition of the business.

PHONOGRAPHY.

In the revised course of study for the High Schools, phonography is offered to the third-year class as the elective substitute for a foreign language, and to the fourth-year class as one of the fourteen electives. Except in the Evening High School, phonography has not, until this time, found a place in any of the courses of study for the Boston public schools. Next year the full value of the study to pupils of the High Schools will be tested. For the present it is sufficient to be assured of its practical utility, its convenience, its time-saving.

ELECTIVE STUDIES.

There is no choice of studies in the Primary and Grammar Schools. Parents, after deciding to send their children to a higher school, choose whether to send them to one of the Latin Schools, there to be prepared for admission to college; or to one of the High Schools, there to be prepared "for life," for business, for admission to the Normal School or to the Institute of Technology, or even to a college. This choice of courses of study is an important feature of the

Boston public schools. Nor does the choice stop here. In the third-year course of study for the Latin Schools and the two years following, a choice between French and German is allowed. The following generous note mentions what other choices of study might be made and what supplementary work might be done if the conditions were favorable and the circumstances of the Latin Schools would permit:

To meet the special needs of some pupils, they will be allowed—if the circumstances of the school permit and the head-master consent—(a) to substitute the history of the United States and of England for the history of Greece and of Rome; (b) to substitute solid geometry (or the elements of analytic geometry, or advanced algebra, or logarithms and plane trigonometry with its applications to surveying and navigation) for Greek composition; (c) to substitute advanced French, or advanced physics, or advanced mathematics, for advanced Greek; (d) to substitute elementary German and solid geometry, or any other of the branches of mathematics mentioned in (b), for advanced Greek; and (e) to "anticipate" studies of the Freshman year.

There is a liberal choice of studies offered in the course of study for the High Schools: In the first year, any one of the three languages, French, German, and Latin, may be studied. In the second year, there is a choice between book-keeping and zoölogy. In the third year, the foreign language already studied two years may be continued; or French or German may be begun; or phonography may be taken instead of a foreign language. There is also a choice between chemistry and drawing. In the fourth year, all the studies or exercises, except rhetoric and composition, singing, and gymnastics, are elective. A choice of studies, occupying twelve hours a week, must be made from the following fourteen electives: English literature, history, French, German, Latin, advanced algebra, solid geometry, plane trigonometry (with applications to surveying and navigation), analytic geometry, physics, chemistry, astronomy, drawing, phonography. The limited choice of studies allowed by the former course of study was, in the main, attended with good results. One safeguard was this requirement, that "the choice of studies must be subject to the approval of the principal." But as the number of teachers is proportioned to the number of scholars, there is danger in some schools either that the choice of studies will be too much restricted or that the time and energy of teachers will be spent in attempting to teach too many subjects. Although the safeguard mentioned above still exists, yet the elective course of study for the fourth-year class must be, at present, regarded as experimental. Whether such unlimited choice of studies and such unrestricted assignment of time to the chosen studies be approved in the future will largely depend upon the wisdom of the principals. It may be found that, after experience and conference, the circumstances and aims of the fourth-year classes are so similar as to warrant a definite assignment of time to the several electives.

TIME COURSES OF STUDY.

Before revision, the courses of study for the Primary, Grammar, and High Schools were time courses; that is, the number of hours a week to be given to each study or exercise was prescribed. Some changes in the assignments of time have been made by the revision; and the course of study for the Latin schools has been made a time course. In the appendix to this report is given the number of hours assigned to the several subjects in each of the four courses of study.

GUIDING PRINCIPLES OF THE REVISION.

For the foregoing exposition of the changes made in the late revision of the four courses of study and for the qualifying remarks and the incidental suggestions or criticisms, the writer of this report is alone responsible. The Board of Supervisors are responsible only for the principles that guided them in making the revision, for their recommendations, most of which were adopted by the Committee on Revision, and for the arrangement and form of the courses as finally printed. In doing this work, the Board of Supervisors, seeking information and suggestions from trustworthy sources, and endeavoring to keep up with the times, felt bound to recommend only such changes as would probably be of benefit to the schools. They kept in mind that courses of study are not made in a day, but are the results of years of experience; that novelty, though attractive, is a fool's reason for change; that theory, though its armor seem impenetrable, should not be tested by subjecting thousands of pupils to the risk of loss and injury. One delusion especially was avoided - a delusion that might be appropriately styled the foreign mania. Briefly stated, it is this: What Berlin and Paris pupils do, Boston pupils can and should do. It does not require much consideration to detect the fallacy in this amusing assertion. If the national institutions, the social and domestic life, the moral atmosphere, hereditary influence and predisposition, the organization of schools and the ends of education, the ability and methods of teachers, the motives of pupils, and the time they give to study were the same here as in Prussia or in France, it would be reasonable to expect Boston pupils to do the same and as much as Berlin or Paris pupils, and vice versa.

But though the conditions of life and study were the same here as abroad, it would not be safe to follow blindly foreign guides. Let some evidence be given by witnesses, who are, presumably, trustworthy and unprejudiced. The following quotations are from the address of Emperor William, of Germany, made to the Commission on School Reform:

In the first class of the Gymnasium at Kassel, "I required 51, 61 to 7 hours a day for home work. Add to that number 6 hours at school, 2 hours for meals, and you can figure for yourselves what remained of the day. If I had not had the opportunity of riding to and from school, and of taking some other outdoor exercises, I should never have known how the world looks." . . . "Gentlemen, the bow has been stretched to its fullest tension, and it cannot stand this strain." . .. "Nearly all the so-called Hungercanditaten (people who can barely eke out an existence), especially the journalists, are shipwrecked gymnasiasts; and this is a danger to us. These morbid conditions, which exist in too high a degree, must be removed - the meadow cannot absorb any more water." . . . "The school hours, including those for singing and gymnastics, for a boy of 12, 13, or 14 years, amount in the third and fourth classes to an average of 32 a week, but rise in some institutions to 35, and in the fourth and fifth classes of the Real-Gymnasium to 37." . . . "The statistics with regard to short sightedness are really frightful; and, with regard to many other kinds of disease, there exist no adequate reports. Let us begin to reflect, therefore, what sort of progeny we are raising for the defence of our country. I want soldiers and a powerful nation, men that can serve the country as intelligent leaders and officials. All these near-sighted people are of no practical use; for how is it possible that a man who cannot use his eyes will accomplish much? In the graduating classes, near-sightedness has risen, in single instances, to 74 per cent. In my own class, although we used a good room, the teachers' conference chamber, as a class-room, - which, in accordance with the wish of my mother, had been well-ventilated and had only side light, — out of 21 pupils, there were 18 that wore spectacles, two of whom could not see the blackboard." . . . "Gentlemen, men ought not to look at the world through spectacles."

"The main trouble lies in the fact that, since 1870, the philologists have sat in their gymnasia laying main stress upon the subject-matter, upon the learning and knowing, but not upon the formation of character and the needs of life." . . . "The underlying principle" of the examinations "is that the pupil must, first of all, know as many things as possible. Whether this knowledge fits for life or not, is immaterial." . . . "We must turn aside from the principle that it is the theory we are after, and not the practice; the young man must be educated for practical life."

Nor is the following evidence of M. Jules Simon, formerly a distinguished minister of education in France, less forcible, with regard to the product of French education:

"I cannot help feeling that these boys who go from French rhetoric to Latin rhetoric, from German to history, from chemistry to mathematics, are left to themselves. They are not helped at all, because they are helped by too many people. There are professors, but no teachers; there are students and an audience, but no scholars; there is instruction, but no education. They make bachelors, licentiates, and doctors, but making a man is out of the question. On the contrary, they spend fifteen years in destroying his manhood. What do they turn out for the community? A ridiculous little mandarin, who has no muscles; who cannot leap a gate; who cannot give his elbows play, or fire a gun, or ride; who is afraid of everything. But, on the other hand, he is crammed with every kind of useless knowledge; he does not know the most necessary things; he can neither give advice to anybody else nor to himself; he needs guidance in everything. Feeling his weakness and having lost his leading-strings, he, as a last resource, throws himself into State socialism. 'The State must take me by the hand, as the University has done up to now. It has taught me nothing but passive obedience. A citizen, did you say? I should, perhaps, be a citizen, if I were a man."

Although the words of M. Simon and of Emperor William may present only a one-sided view of the results of French and German education, yet they serve as a caution to Americans against hastily adopting foreign schemes of education or incorporating into courses of study a portion of foreign programmes. To develop American schools along the lines that our fathers laid down, and for the purposes and in the spirit that they cherished, is probably in accordance with the demands of American life and with the genius of American institutions. Peculiar difficulties and obstacles, arising from the conditions of American life, from the temperaments of our people, and from the character of our mixed population, must be removed or surmounted in our own way. In other words, our education must be American and not European; we must work out our own salvation with fear and trembling, but with profound faith that at last our people will be so trained as to reach even the lofty ideal of Milton: "I call, therefore, a complete and generous

education that which fits a man to perform justly, skilfully, and magnanimously all the offices, both private and public, of peace and war."

EVENING SCHOOLS.

EVENING ELEMENTARY SCHOOLS.

Marked progress has of late years been made in the Evening Elementary Schools. One reason for this improvement was the laying out of a course of study in 1888, which was adopted, and has since guided the instruction of the graded Better classification followed, and more pupils have been taught together and better taught than formerly. The improvement in scholarship has been attended with improvement in conduct. Another cause of progress has been the awarding of diplomas to such members of the first classes as have done at least a passable winter's work and have passed an examination with questions prepared by the Board of Supervisors. The subjects of the examination are reading, dictation, the elements of English composition, arithmetic through simple interest, the elements of geography, of the history and civil government of the United States, and of physiology and hygiene. The number of diplomas awarded in March, 1891, was two hundred and seventy-one. Holders of diplomas are admitted, without examination, to the Evening High School.

It must not be supposed that, because so much interest is taken in the graded classes, there is less interest felt for the ungraded pupils. The adults who are learning to read, the boys and girls who know little of books and much of the rough and tumble of life, and the foreign-born whose knowledge of English is confined to a few phrases and who are soon to become American citizens, receive individual teaching and help; indeed, the centre of interest is and should be with them. The influence of the good work done in the

ungraded classes is far-reaching, and is an unanswerable argument for the existence and the generous support of Evening Schools.

The results of the instruction in Evening Elementary Schools would be much better, if two obstacles could be surmounted, viz.: (1) The irregular or short attendance of the pupils; and (2) the employment of too many young, inexperienced, and inefficient teachers.

Much has been done by some principals to lessen the first evil. It requires tact, sympathy, encouragement, and effort to arouse and preserve the interest of some of the pupils, and, even with the coöperation of parents, to secure the regular attendance of indifferent boys and girls. It might be well, for the sake of these waifs, to authorize an officer to take them from the streets or other "loating" places into school. But whatever may be done to lessen the evil, it will to some extent continue to exist; for many pupils attend as regularly as they can, some of whom come when it would be wiser for them to remain at home. It must not, however, be inferred that pupils who attend school irregularly or only for a short period receive no good. They are at least started and make some progress in the right direction.

The second obstacle might be surmounted by employing in each class-room an able, experienced, and skilful teacher with as many carefully selected assistants as he or she needs. Such a teacher would be worth as much and should be paid as much as a teacher in the Evening High School.

THE EVENING HIGH SCHOOL.

This school has been and is one of the most useful institutions of the city. During its whole existence, under the successive administrations of Anderson, Nichols, Owen, Carrigan, and Paul, it has been directly and indirectly the source of great good, and has repaid many times its cost. This was true even in the dark period of its existence, when, driven

from its home to the little, inconvenient building on Harrison avenue, it seemed to languish. After it was established in its present convenient and commodicus quarters, it began to attract the public gaze. The principal, full of enthusiasm, drew a host of pupils to the school. Although its publicity was offensive and its shortcomings were numerous, yet it secured the affections of its pupils and the confidence of the public. Lately, its work has been done so quietly and unobstrusively that its merits and its improved condition have not attracted public attention. Among the causes whose effect has been to raise the standard of scholarship are the following: (1) The examination for admission; (2) the pursuance of definite courses of instruction in the several departments of study; (3) the granting of certificates of proficiency.

Teachers in the Boston public day-schools and graduates from colleges, from the Boston Normal, Latin, High, Grammar, and Evening Elementary Schools, are admitted without examination. Other applicants are examined in reading, dictation, English composition, arithmetic through decimal and common fractions, and geography, with questions prepared by the Board of Supervisors. In the year 1890–91, about eight hundred candidates were examined for admission to the central school and its two branches, nearly two hundred of whom were refused admission.

The Evening High School has never had what is usually understood to be a course of study. In 1888, however, the School Committee adopted a course of instruction for each department of study pursued in the school. These several courses have since directed the instruction to certain ends, and have kept it, as a rule, within reasonable limits.

It may not be generally known that "the elective system" is firmly established in this school. It is doubtful whether even Harvard College allows more freedom in the choice of studies. There is, however, one exception to this free

selection: Such pupils as are known to be "weak" in certain elementary studies may be required to pursue those before electing higher studies. As a rule, pupils come here for a special purpose; for example, to take penmanship and book-keeping, or Latin and French, or rhetoric and English literature, or algebra and geometry. There are some who study a few subjects one winter and higher or other subjects in several successive winters.

If pupils complete in the school a course of instruction in any department of study, they are allowed near the close of the term to be examined in the same with questions prepared by the Board of Supervisors. If the winter's work of the pupils and the results of their examination are satisfactory, certificates of proficiency are awarded to them. In March, 1891, four hundred and thirty-six different certificates were awarded, as follows: In English literature, 25; rhetoric, 31; elementary English composition, 53. In advanced German, 7; elementary German, 2; advanced French, 11; elementary French, 7. In Virgil, 1; Cæsar, 3. In penmanship, 31. In phonography, 34. In general arithmetic, 35; commercial arithmetic, 32; algebra, 6; plane geometry, 5. Advanced book-keeping, 32; elementary book-keeping, 111. History and civil government of the United States, 7. Physiology and hygiene, 3.

Diplomas of graduation may be awarded to such pupils as have earned certificates whose aggregate value is six or more according to the following schedule of values assigned to different certificates:

| | / First-class cer | tificate | in | English | Literat | ure | | | 1 |
|---------|---|----------|-----|---------|-------------|-----|---|--|-----|
| English | $\begin{cases} \text{First-class cer} \\ \text{Second-class} \\ \text{Third-class} \end{cases}$ | 6.6 | 6 6 | 66 | Composition | | ı | | 12 |
| | (Third-class | 4.6 | 6 6 | 6.6 | 6.6 | | | | 1 |
| French | 5 First-class cer | tificate | in | French | | | | | 1 |
| | Second-class | 4.6 | 66 | 66 | | | | | 1/2 |
| German | 5 First-class eer | tificate | in | German | | | | | 1 |
| | & Second-class | 6.6 | 66 | 6.6 | | | | | 1/2 |

| (First-cla | es cortific | ate in | Latin | | | | | | | | 1 |
|---|--------------|----------|---------|-------|------|-------|-----|---|-----|---------------|----|
| Latin \ Thist-cla | - | ato III | Latin | | • | • | • | • | • | • | |
| $\operatorname{Latin} \left\{ \begin{array}{l} \operatorname{First-cla} \\ \operatorname{Second-odd} \end{array} \right.$ | elass " | 66 | " | | • | | • | | 4 . | | 2 |
| Penmanship: Fi | irst-class o | ertific | eate in | Pen | man | ship | | | | | 1 |
| Phonography: I | First-class | certif | icate i | n Ph | onog | raph | у | | | | 1 |
| Arithmetic $\begin{cases} Fin \\ Se \end{cases}$ | rst-class c | ertifica | ate in | Arith | met | ic | | | | | |
| Arithmetic { Se | cond-class | 3 " | 66 | | 6.6 | | | | | | 4 |
| Algebra: Certif | icate in A | lgebra | ι . | | | | | | | | 2 |
| Geometry 5 Cert | tificate in | Plane | Geom | etry | | | | | | | 12 |
| Geometry { Cert | " | Solid | 66 | | | | | | | | 2 |
| Book-keeping { | First-clas | s certi | ficate | in B | ook- | keep | ing | | | | 1 |
| pook-recebing ! | Second-cl | ass | 44 | 6.6 | 6 | 6 | | | | | 2 |
| History: Certificate in United States History and Civil Government, | | | | | | | | | | $\frac{1}{2}$ | |
| Physiology: Ce | rtificate in | n Phys | siolog | y and | Hy | giene | | | | | 12 |

In March, 1891, the first and the only diploma of graduation from the Evening High School was awarded to Max Paul Woldemar Kreutz.

The future of this school is assured, if it continue to improve. There are signs which indicate that the number of subjects studied is too small and that some departments need to be extended and deepened. It is already recognized that as the Evening Elementary Schools are well classified, governed, and taught, the standard of admission to the Evening High School may be raised without depriving of suitable instruction rejected candidates. Moreover, the standard of scholarship necessary for securing certificates of proficiency may be gradually raised without injustice to the pupils, provided their teachers are able and efficient. This school has been fortunate in securing, for the most part, experienced and successful teachers. It is these and only these who can make profitable the few hours the pupils spend here, and who can raise and maintain a high standard of scholarship.

It is doubtful whether citizens appreciate the moral and intellectual influence of this school. While it is of great practical value to this commercial city, it is at the same time a moral force and an intellectual centre. In a humble way, it does at least a part of the work that promoters of

"University Extension" hope to accomplish in this country. Levelling upwards, this school increases the power of gaining a living and of adding wealth to the city; makes more intelligent and better citizens; cultivates refinement; and enlarges the moral and intellectual resources of the people.

THE HORACE MANN SCHOOL FOR THE DEAF.

No Boston public school, whether established for a general or for a special purpose, accomplishes its objects with more skill and thoroughness than the Horace Mann School for the Deaf. In the words of Superintendent Seaver, it "is verily our most precious educational gem." An excellent description of its origin and growth, and, incidentally, of the great good it has here and, through its example, elsewhere accomplished, is given in school document No. 24, 1890. But the description is incomplete. There are indications that the oral method of teaching the deaf in the Horace Mann School is to produce even better results than were anticipated a few years ago.

"Visible Speech," invented in Edinburgh by Alexander Melville Bell after twenty years of study and investigation, and first used in England for instructing the deaf in 1869; was introduced in 1871, through the agency of his son, Alexander Graham Bell, into this school. Here training by means of visible speech has been given for twenty years by Miss Sarah Fuller and her assistants, with results that prove the power and beauty of human skill when directed to noble ends and when exercised with patience and fidelity.

It is, indeed, a great feat for a child who has never heard a sound, to communicate orally his thoughts and feelings to members of his family and to read responses from their lips. The deaf child, with this accomplishment, goes out into the world's stir and activity and "gets on" fairly well; he follows his calling and enjoys his life far better than if he had

never learned to talk and to read the lips. But, except at home and among friends, he is likely to be at a disadvantage - at least, he must meet obstacles to a free interchange of thought and feeling with others. How may some of these obstacles be surmounted? Miss Fuller's answer to this question illustrates the principle that controls her methods of instruction. The principle is, that deaf children should be taught and treated, so far as the ends to be reached and the circumstances permit, just as hearing children are taught and treated. Her answer to the question would be: After completing the course of instruction in the Horace Mann School, the pupils should be sent to a school with hearing children. The evidence thus far collected with regard to pupils who completed the course of study in the Horace Mann School and then entered a school with hearing pupils, shows that the presence and instruction of deaf pupils cause but slight, if any, inconvenience to teachers, and that the deaf reach at least as high a standard of scholarship as hearing pupils. As the good work goes on, we have reason to expect that the deaf, accustomed to meet and cope with the same difficulties as hearing pupils, will after leaving school be able to enter upon their work in life with but few of the disadvantages that arise from deafness, and with confidence that they can, for the most part, understand what is said to them and be understood when they address others.

On recommendation of the Board of Supervisors, the Committee on the Horace Mann School granted, last June, to three pupils certificates of having completed the course of study pursued here. The Board of Supervisors now recommend that diplomas of graduation from the Horace Mann School be granted to such of its pupils as shall have completed the course of study and passed a satisfactory examination.

The assistants in the Horace Mann School are carefully

selected from the best teachers in the other public schools. They must be gentle, sympathetic, patient, firm, selfsacrificing, and devoted to their work; they must possess good sense, tact, and skill; they must know the principles of education and the best methods of teaching. Entering upon their duties with such qualifications, they at once become pupils of Miss Fuller, who gradually trains them in the special art of teaching the deaf. After years of experience, they become expert in this art; and, were they to resign their places, it would be difficult, if not impossible, to fill the vacancies. It seems, therefore, reasonable that these assistants should be paid salaries commensurate with their skill and experience; at least, that the difference between the worth of an expert and the worth of a beginner should be marked by a greater difference in salary than is now the case. It would seem that a more just discrimination would be made, if a sliding scale of salaries were adopted for the assistants in this school.

INSPECTION AND EXAMINATION.

The work of inspection and examination done by the Supervisors or by the Board of Supervisors in the year 1890-91 may be summarized as follows:

- 1. The supervision of 1559 teachers, of whom 1401 taught in the day schools, and 158 in the evening schools. A brief report upon each of these, except 38, was made for the use of the committees on the schools.
- 2. Reports on the mode of government, on classification and promotion of pupils, and on the needs of the schools.
- 3. The special supervision of 114 teachers appointed on probation. Two supervisors, after independent investigation, reported upon each of these to the Board of Supervisors, who recommended confirmation, or an extension or a closure of probation.

- 4. (a) In the August vacation of 1890, the examination of 104 candidates for certificates of qualification, to 79 of whom the Board of Supervisors in the September following granted certificates. (b) The special examination of 13 candidates, at different times, to whom certificates were granted. (c) The examination of Normal-School pupils, to 65 of whom certificates were granted. The whole number of teachers' certificates granted in the year 1890-91 was 157.
- 5. Preparation of questions for the promotion examination from Primary to Grammar Schools; for the admission examination to the Latin Schools, to the High Schools, and to the Elementary Evening Schools; for the diploma examination of the Grammar Schools, of the third-year and the fourth-year classes in the High Schools, of the Latin Schools, and of the Normal School; and for the examination of candidates in the Evening High School for certificates of proficiency. The results of these various examinations, together with the previous records of the candidates, were presented to the Committee on Examinations, who decided what disposition to make of the candidates.
- 6. Canvassing the records of and making recommendations concerning pupils who, entering the High Schools on probation, spent one year there.

Some of the more important statistics of the examinations are printed in the appendix of this report.

In addition to the regular work, the Board of Supervisors, or the Supervisors severally, did much special work by request of the Superintendent or of some member or some committee of the School Board. In the latter part of May, in accordance with a request of the Committee on Examinations, the Board of Supervisors examined the fourth classes of the Grammar Schools in reading, dictation, composition, geography, and arithmetic. The main object of this examination was to set up a standard of scholarship to be reached by pupils who have half completed the course of

study for the Grammar Schools. The questions that were used are printed in the appendix of this report, and the results of the examination are on file in the office of the Board of Supervisors.

THE FUTURE OF THE SCHOOLS.

The changes lately made in the methods of public-school instruction have not, as yet, produced their legitimate and complete results. The Kindergartens, although adopted as the basis of instruction in Boston, have taught but a small portion of the many little children that are knocking for admission. When the demand for Kindergartens is fully met and they exist here in every school district, then we may expect to see a radical change in the purpose, spirit, and methods of instruction in the higher schools. leaven of the Kindergarten will leaven the whole lump. The influence of the Kindergarten will be the stronger, because it is in full accord with the solid sense of the people and with the most enlightened sentiment. There is no doubt in the minds of thoughtful persons that such instruction as does not affect the life, does not refine the manners nor strengthen the moral purpose, and does not develop power and efficiency, is not only a waste of time, but also, when large numbers of children are concerned, a huge financial and social blunder. In accordance with this feeling, manual training and physical training have been introduced into the regular course of instruction, and the methods of teaching in the Primary Schools have become more real and natural.

When we search for the cause of certain shortcomings in the Grammar and High Schools, we are likely to think of multiplicity of studies; we are prone to say that instruction now-a-days is kaleidoscopic, that the impressions of one hour or one day are effaced by those of the next hour or next day, and that but little knowledge so sinks into the mind as to become a permanent possession. Although this statement contains much truth, yet the want of permanency in the results of instruction is accidental. The real evil is deeper, and a more than superficial remedy must be found for it. The evil is — in the opinion of the writer of this report — the direct product of a false or, rather, of a narrow philosophy.

While the common sense of mankind teaches that the whole nature of the child - body, mind, and heart - should be educated, a common notion has prevailed that the school should educate the mind alone. Nor has the current psychology corrected this notion. Separated on the one hand from physiology and on the other hand from sociology, current psychology has become but little more than a logical consideration of the mental powers, according to the conception of some one man or of some school of philosophy; and - what is worse - the intellect has usually been made so prominent that the feelings and the will have been almost left in abevance. The connection of mental life with organic life has received but little, if any, attention; even the nervous system, upon whose action the mental and spiritual life of man are so dependent, has been hardly touched by the current psychology. Moreover, the study of animal life, of savage life, of child life, and of man as shown in biography, history, and literature, has been lost to the common psychologist engaged in studying the workings of his own mind and in metaphysical speculations too fine or too lofty for common humanity.

Dr. Hopkins in this country and Froebel in Germany have taught that the whole nature of the child must be understood in order that he may be trained aright. "The whole child must be sent to school" and so trained there that his whole nature will grow in beauty and strength. Then the shortcomings of the schools will diminish; word-knowledge

without a basis of reality will disappear; the minds of children will take in what is adapted to their nurture and culture; and the powers to strive for and to accomplish will be strengthened and perfected.

In closing this report, the members of the Board of Supervisors are reminded of the sickness and absence of Supervisor Mason, who has given to us for sixteen years the benefit of his counsel and experience, and to the schools his faithful and efficient supervision. May the remembrance of the forty years of fruitful service that he has rendered the Boston schools be to him the source of great gratification and happiness.

Respectfully submitted,

For the Board of Supervisors,
ELLIS PETERSON.

APPENDIX.

PRIMARY SCHOOLS.

Tabular View of the Number of Hours a Week given to Studies and Exercises.

| CLASS. | Opening Exercises. | Observation Lessons and Manual Train ing. | Language. | Arithmetic. | Drawing. | Music. | *Physical Training AND Recesses. | Summary. |
|------------------------|-----------------------|--|-----------|-------------|----------|--------|---|----------|
| ш | $\frac{1}{2}$ | 3 | 13 | 21 | 11/2 | 1 | $\begin{array}{c c}1 & 2\frac{1}{2} \\ & 3\frac{1}{2} \end{array}$ | 25 |
| II | 1/2 | 3 | 112 | 31 | 11/2 | 1 | $\begin{array}{c c} \hline 1\frac{1}{2} & 2\frac{1}{2} \\ 4 & \\ \end{array}$ | 25 |
| I | 1/2 | 3 | 11½ | 31 | 1½ | 1 | $\begin{array}{c c} \hline 1\frac{1}{2} & 2\frac{1}{2} \\ 4 & & \\ \end{array}$ | 25 |
| Total No. of Hours | 112 | 9 | 36 | 91/2 | 41/2 | 3 | $\begin{array}{c c} 4 & & 7\frac{1}{2} \\ & & 11\frac{1}{2} \end{array}$ | 75 |
| Total per cent.of Time | 2% | 12% | 48% | 123% | 6% | 4% | 5½% 10% 15½% | 100% |

^{*} The time assigned for recesses and not used therefor is to be spent in physical training.

Tabular View of the Number of Hours a Week given to Studies and Exercises. GRAMMAR SCHOOLS.

| | gramma eruoH | 25 | 25 | 25 | 25 | 25 | 25 | 150 | %001 |
|---------------------|-----------------------------------|---------------|--|----------------|--------------|--------------|--------------------------|---------------------|---|
| | | | | | | | | | - |
| * Physical Training | AND RECESSEE. Physical Recesses. | 18 5 2 | $\frac{1_6}{2} \left \frac{\hat{b}}{6} \right $ | 18 5 2 | 14 6 2 | 16 5 | $\frac{1\frac{1}{6}}{2}$ | 7 5 | 48% 38% 8% |
| | lenaeM gaiaistT | ପ | 73 | 2 | 73 | 7 | 2 | 12 | 8% |
| | Music. | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 4% |
| .5 | gaiwa1A | 13 | 13 | $1\frac{1}{2}$ | 112 | 12 | 12 | 6 | %9 |
| -ure | History a Civil Gove ment. | | | | 2 | 27 | ಣ | 72 | 2% |
| ·Ku | Geograpl | 23 | 62 | 22 2 | 222 | 22 | | 112 | 130% |
| -d | Боок-кее Заі | | | | | | 14 | 14 | 9/9 |
| .oi | təmitirA | 43 | 412 | 43 | 95 25 | 31 | 3 <u>1</u> | 24 | 16% |
| LANGUAGE. | and tten Reading. | 5½ 4½ 10 | $.5\frac{1}{2} 4\frac{1}{2}$ | 5 4 4 2 | 4½ 4 8½ | 4½ 3½ 8 | 43 35 84 | 294 245 544 | $19\frac{50}{6}\% \mid 16\frac{1}{3}\%$ |
| | Oral and Written Exercises. | | | <u> </u> | | | | | 16 |
| | Element- ary Science. | 12 | 15 | 12 | 15 | 13 | 63 | 94 | % 1 9 |
| | Opening Exercises. | – | -(6) | -63 | ⊣ ≈ | -IC3 | − €3 | က | 2% |
| | CLASS. | VI. | , . | IV. | III. | II. | i | Total No. of Hours. | Total per cent. of Time. |

*Time assigned for recesses and not used therefor is to be spent in physical training.

Tabular View of the Number of Hours a Week given to Studies and Exercises. LATIN SCHOOLS.

| Total. | 25 | 25 | 255 | 25 | 25 | 25 | 150 | 100% |
|---|-------------------------------------|--------------------------------------|--|--------------------------------|-----------------------------|--------------------|---------------------------|--------------------------------|
| Study Hours. | 10 | 10 | oi. | 10 | 10 | 10 | 30 | 50% |
| Physical Training and Singing. | 61 | Φ1 | 63 | 61 | 61 | 21 | 12 | %8 |
| Mathematics. | Arithmetic, 4 4 Objective Geometry, | Arithmetic, 3½ Objective Geometry, ½ | Algebra, | Algebra, Review of Arithmetic, | Algebra, Plane Geometry, | Plane Geometry, | \$55 | 15% |
| Elementary Science. | Physiology, | Physiology, Botany, | Botany, Astronomical and Physical Geography, | | | Physics, | ræ | 31% |
| Geogra- phy. | ©1 | 23 | The state of the s | | | | 44.2 | 3% |
| Greek. | | | | 10 | 10 | - 4 2 | 143 | 93% |
| Latin. | 10 | 10 | 10 | 4 | 4 | 4 | 27 | 18% |
| French or German. | | | 35 | C1 | 67 | | -100 1- | 2% |
| English and History. | 9 | 9 | 13 | 4 | 4 | c) | 27 | 18% |
| CLASS. | VI. | > | IV. | III. | П. | i | Total No. of Hours. | Total per cent. of Time. |

time is divided into 25 periods, each period, or "hour," being about 53 minutes.

HIGH SCHOOLS.

Tabular View of the Number of Hours a Week given to Studies and Exercises.

| Total. | 255 | 20 10 | 53 | 23 |
|-----------------------|---|---|---|--|
| Study Hours. | 10 | 10 | 10 | 7.0 |
| Physical Training. | 62 | 62 | 64 | 2/ |
| .oisuK | - | - | - | - |
| Drawing. | 63 | 61 | 3 Elective sabstitute : Chemistry. | n, Latin, Ad- tic Geometry, |
| Science. | Botany, after March 1, | Zoology, 3 Elective substitute: Book-keeping. | Physics, 3 Chemistry, 3 Elective substitute for Chemistry: Drawing. | Electives: English Literature, History, French, German, Latin, Advanced Algebra, Solid Geometry, Plane Trigonometry, Analytic Geometry, Physics, Chemistry, Astronomy, Drawing, Phonography, |
| Mathematics. | Algebra, till March 1, 5 or 4 After March 1, 4 or 3 | Algebra and Plane Geometry, 4 or 3 | Plane Geometry, Review of Algebra and Arithmetic, | Electives: English Literature, History, French, Gevanced Algebra, Solid Geometry, Plane Trigonometry, A Physics, Chemistry, Astronomy, Drawing, Phonography, 12 |
| Foreign Language, | 4 or 5 | 3 or 4 | 3 Elective substitute: Phonography. | English Literat ra, Solid Geome ristry, Astronon |
| Hlatory. | Ancient, | Mediæval and Modern, 2 | Modern, with Civil Government, 3 | Electives: vanced Algebi Physics, Chen |
| English. | Till March 1, 4 After March 1, | 00 | 00 | Rhetoric and Composition, |
| Ставв. | First Year. | Second Year. | Third Year. | Fourth Year. |

Norg: Opening exercises occupy 4 of an hour a day, or 14 hours a week. A half-hour a day is given to recess, or 24 hours a week. The remaining time is divided into 25 periods, each period, or "hour," being about 53 minutes.

Examination of the Fourth Classes in the Grammar Schools.

BOSTON, TUESDAY, MAY 19, 1891.

DICTATION

Penmanship, and for Spelling, Punctuation, and use of Capitals.

At 9.10, A.M.

TO THE EXAMINER: Require each pupil to write, at the head of his sheet of paper, his name in full, the name of his school and class, and the subject and date of this examination. Tell him not to write in the margin nor to ask any questions concerning the examination. Read to the pupils the whole of the following, and then require them, as you slowly dictate, to write it on paper with pen and ink:

My Work in School.

I am in the fourth class of the Washington School. It is in a three-story building on School street. Miss Emma G. Porter is my teacher.

By following Miss Porter's instructions I have learned to be prompt,

orderly, and industrious. I have the hardest work with the problems in arithmetic. Yesterday it took me two minutes and fifteen seconds to find how many square inches an acre contains. The last lesson in geography was from the globe, and was a review of the circles and zones.

About three o'clock last Thursday my teacher said, "How many of you have learned a piece of poetry to recite this afternoon?" I was called upon to recite one of Longfellow's poems, "The Village Blacksmith." This is the

way it ends:

"Thus at the flaming forge of life Our fortunes must be wrought; Thus on its sounding anvil shaped Each burning deed and thought."

BOSTON, WEDNESDAY, MAY 20, 1891.

COMPOSITION.

From 9.10 to 10.30, A.M.

To the Pupil: Use pen and ink. At the head of the sheet of paper which is to contain your answers, write your name in full, the name of your school and class, and the subject and date of this examination. Do not write in the margin. During the examination, ask no questions concerning it.

Take either A or B, but not both:

A

Write a letter to some friend. You may use the following topics or any others:

1. (a) The weather of May as compared with that of winter. (b) The grass; the plants and flowers; and especially the fruit trees filled with blossoms. (c) The birds and their nests.

2. (a) The school of which you are a member. (b). How long you have been connected with it. (c) Pleasant acquaintances; helpful teachers;

and studies that you like best.

3. (a) Why you hope to graduate, in a few years, from the school. (b). What you intend to do after you have left school.

With ruler and lead peneil, draw on your sheet of paper the outline of an envelope. Direct the envelope to your friend — naming the town or city, the street and the number where he or she lives or is supposed to live. Indicate, on the envelope, the place of the postage-stamp.

B

- Write, from topics of your own, the story of a fishing excursion.
 Fill each blank below with either may or can correctly used:
- (a) I take your pencil? Yes, you if you have none.

(b) I - jump down the steps; - you?

(c) I wish you would let me go home; — I go?

(d) — I go home? Yes, you — go.

(e) — you use may correctly when you ask a question?

BOSTON, THURSDAY, MAY 21, 1891.

GEOGRAPHY.

From 9.10 to 10.30, A.M.

To the Pupil: Use pen and ink. At the head of the sheet of paper which is to contain your answers, write your name in full, the name of your school and class, and the subject and date of this examination. Place before the answers the same figures or letters that are before the questions. Do not write in the margin. During the examination ask no questions concerning it.

1. Explain the use of meridians and parallels.

2. What are the occupations of the people of the Frigid Zones? Why?

3. Either (a) name the mountain systems of North America, give their general direction, and show their relation to the river systems; or (b) name the river systems of Europe, and show their relation to the seas and oceans.

4. (a) Mention the three largest political divisions of South America,

and (b) state the chief exports of each of the three.

5. State where the following productions are most abundant: Cotton, sugar, rice, tobacco, grain, lead, copper, silver, and gold.

6. Either (a) describe a journey from Boston to San Francisco; or

(b) describe a voyage from Havre to St. Petersburg.

7. Answer either of the following questions: (a) Why is the coast-line of the Atlantic Ocean more favorable to commerce than the coast-line of the Pacific Ocean? (b) How would you explain the change of seasons during the year?

BOSTON, TUESDAY, MAY 19, 1891.

ORAL ARITHMETIC.

At 10 A.M.

To the Examiner: Require each pupil to write, at the head of his sheet of paper, his name in full, the name of his school and class, and the subject and date of this examination. Tell him not to write in the margin, nor to ask any questions concerning the examination. Begin the examination at 10 A.M. Read slowly and distinctly each question once, or, if need be, twice to the pupils; give them a reasonable time for finding the answer mentally; and require them, at a signal from you, to write it. As soon as the last question is answered, collect the papers and do not return them to the pupils. Then begin the examination in Sight Arithmetic.

1. Albert saved 180 ten-cent pieces. How many dollars did he save?

2. Ada paid 84 cents for 12 yards of ribbon. How much, at the same rate, should she pay for 7 yards?

3. Benjamin earned \$72, and gave to his mother \(\frac{8}{9} \) of it. How many dollars did he give her?

4. Bertha bought 3 pints of oysters every Saturday. How many quarts

of oysters did she buy in 12 Saturdays?

5. Charles dug 2 bushels and 2 pecks of potatoes, and sold them at 40 cents a peck. For how many dollars in all did he sell them?

6. Catherine's flower garden is a square, 8 feet 3 inches long. How

many yards long was a string that she stretched around it?

7. David had a board that was 8½ feet long. He sawed off of it a piece 24 feet long; and then sawed the remainder into pieces, each 4 of a foot long. Into how many pieces did he saw the remainder?

8. Delia made into bread 2^3_{ij} of a barrel of flour. How many hun-

dredths of the flour did she make into bread?

- 9. How many days will it take Edgar to save \$15, if he save five cents a day?
- 10. Ella earned \$21 in $\frac{7}{10}$ of a month. How much, at the same rate, could she earn in 5 of a month?

TO THE PRINCIPAL: Mark the examination in Oral and Sight Arithmetic as follows:

| 20, 19, or 18 right answers | | 1. | 11, 10, 9, or 8 right answers | | 4. |
|-----------------------------|--|----|-------------------------------|--|----|
| 17, 16, or 15 " " | | 2. | 7, 6, 5, or 4 " " | | 5. |
| 14, 13, or 12 " " | | 3. | 3, 2, 1, or 0 " " | | 6. |

Write, in red ink, the mark for the examination in Oral and Sight Arithmetic, in the upper right-hand corner of the paper containing the answers to the questions in Oral Arithmetic.

BOSTON, TUSEDAY, MAY 19, 1891.

SIGHT ARITHMETIC.

From the close of the examination in Oral Arithmetic to 10.45 A.M.

To the Pupil: Use pen and ink. At the head of the sheet of paper which is to contain your answers, write your name in full, the name of your school and class, and the subject and date of this examination. Place before the answers the same figures that are before the questions. Do not write in the margin. During the examination ask no questions concerning it. ask no questions concerning it. Solve the ten following problems without using pen or pencil, and write the answers only:

1. Frank had \$5.50. He spent $\frac{3}{5}$ of this for a pair of skates and \$0.20 for a polo stick. How much money had he left?

2. How much in all did Frances gain by buying 5 dozen pinks at 24

cents a dozen and selling them at 5 cents a pink?

3. The estate of George's father was valued \$1029008.675. Express its value in words.

4. Gertrude correctly found, without a moment's delay, 1000 times \$2.675. What do you find it to be?

5. Henry paid the gas bill for April. It was for 600 cubic feet of gas at \$2.50 for 1000 cubic feet. How much did he pay?

6. Helen's age was $\frac{4}{5}$ of Ida's, and Ida's age was $\frac{5}{8}$ of Julia's. What fractional part of Julia's age was Helen's?

7. Isaac cut two ropes, one 36 feet long and the other 48 feet long, into

equal pieces as long as possible. How many yards long was each piece?

8. Isabel will spend $\frac{5}{9}$ of her vacation at the sea-shore, $\frac{5}{12}$ of it in the country, and the remainder at home. What fractional part of her vacation will she spend at home?

9. Jacob built a fence that was 18 rods 8¼ feet long. He built ¼ of a rod each day. In how many days did he build the fence?

10. Julia saved, each month of the year, a part of her earnings, as given

below. How much did she save the whole year?

\$6.36 2.63 4.45 7.19 5.93 9.72 7.47 8.25 4.64 5.36 6.50 8.75

BOSTON, FRIDAY, MAY 22, 1891.

WRITTEN ARITHMETIC.

From 9.10 to 10.30, A.M.

To the Pupil: Use pen and ink. At the head of the sheet of paper which is to contain your answers, write your name in full, the name of your school and class, and the subject and date of this examination. Place before the answers the same figures that are before the questions. Do not write in the margin. During the examination ask no questions concerning it. Solve the eight following problems, using pen and ink. Give the whole work:

1. Mr. Cashman bought at his grocer's the following articles: 25 gallons of molasses, at $\$0.62\frac{1}{2}$ a gallon; 248 pounds of sugar, at $\$0.04\frac{3}{4}$ a pound; 15 pounds of coffee, at $\$0.33\frac{1}{3}$ a pound; 5 barrels of flour, at $\$6.62\frac{1}{2}$ a barrel; and 48 gallons of oil, at $\$0.08\frac{5}{8}$ a gallon. He paid cash for the same. How much did he pay?

2. Mr. Blank's bill for 38.5 tons of coal was \$206.745. How much was

the coal a ton?

3. Mrs. Housekeeper used 9 gallons, 3 quarts, and 1 pint of oil a month. If she paid \$0.09 a gallon, how much did the oil cost her for 8 months?

4. Mr. Eastman owned 5200 acres of western land. He gave .17 of it to one son and .33 to his other son, and then divided the remainder into 100-acre lots. Into how many lots did he divide the remainder?

5. For how much did Mr. Belmont sell $105\frac{3}{16}$ acres of land, at \$78\frac{2}{3}\$ an

acre?

6. In a school, $\frac{9}{24}$ of the pupils were good readers; $\frac{17}{36}$, passable readers; $\frac{1}{16}$ poor readers; and the others, excellent readers. What fractional part of the school were excellent readers?

7. What did Mr. Landowner receive for 5 acres, 26 square rods, and

1811 square feet of land, at \$0.02 a square foot?

8. Mrs. Cutter made from $16\frac{2}{3}$ yards of cloth as many garments as could be made, each containing $\frac{5}{8}$ of a yard. What fractional part of a yard had she left?

TO THE PRINCIPAL: Mark the examination in Written Arithmetic as follows:

| 8 | right a | nswers | | 1. | 3 1 or 2 | right | answers | | | | 4. |
|---|---------|--------|--|-----|-------------|-------|---------|--|---|---|----|
| | | | | | | | | | | | |
| õ | 4.6 | " | | 3+. | 0 | " | 66 | | • | • | 6. |

General Examination of Candidates for Certificates of Qualification to teach in the Boston Public Schools, August, 1890.

| GRADES. | Whole number of Candidates. | Number who withdrew from the examination. | Number to whom certificates were not granted. | Number to whom certificates were granted. | Number who having been refused certificates for which they had applied were granted lower certificates. | Whole number to whom certificates were granted. |
|--|--|--|--|--|---|---|
| First Grade Second Grade Third Grade Fourth Grade Kindergarten Cookery Bewing Drawing Drawing Drawing Vocal and physical culture Franch wid Core | 20 10 11 24 16 4 4 8 1 | 1 - 2 - 1 4 - | 5 1 9* 2 1 1 2 1 — | 15 8 2 22 13 3 1 3 1 | 5 1 - - | 15 13 2 23 13 3 1 3 1 |
| ical culture French and German | 1 4 | | 1 | 3 | - | 1 3 |
| Total | 104 | 8 | 23 | 73 | 6 | 79 |

^{*} Eight of the nine were not refused certificates, but were credited with such examinations as were either excellent or good.

Special Examination for Certificates of Qualification.

Thirteen candidates specially examined to fill vacancies were awarded certificates as follows: Six in drawing, two in physical training, two in phonography, one in penmanship; one a third-grade and one a fourth-grade certificate.

Teachers on Probation.

| No. of teachers appointed on probation from Sept. 1, 1890, to Sept. 1, | |
|---|-----|
| 1891 | 114 |
| No. of these who were graduated from the Boston Normal School . | 59 |
| No. of teachers whose term of probation regularly expired in that year, | 114 |
| No. of the latter who were regularly recommended by the Board of | |
| Supervisors and confirmed by the School Committee | 94 |
| No. whose probation was extended and who were afterward confirmed, | 5 |
| No. whose probation was extended beyond that year | 2 |
| No. who resigned before confirmation | 11 |
| No. confirmed whose term of probation had been extended into that | |
| year from a previous year | 4 |

Promotions from Primary to Grammar Schools.

| No. of pupils examined for promotion from | | | | |
|---|-------|-----|--|-------|
| Schools, in February, 1891 | | | | 430 |
| No. of these promoted to Grammar Schools. | | | | 421 |
| No. not promoted to Grammar Schools . | | | | 9 |
| No. of pupils examined for promotion in June. | , 189 | 1 . | | 5,532 |
| No. of these promoted to Grammar Schools | | | | 5,415 |
| No. not promoted to Grammar Schools . | | | | 117 |

Examination for Diplomas in 1891.

| Schools. | No. of Candidates for Diplomas. | No. granted Diplomas. | No. refused Diplomas. |
|---|---|---|-----------------------------|
| Normal Boys' Latin Girls' Latin English High Girls' High { 4th year | 65 41 13 160 65 114 24 14 69 50 22 31 19 2,499 | 65 41 13 150 65 107 22 14 69 47 20 30 19 2,413 | 10 7 2 3 2 1 |
| Total No. | 3,186 | 3,075 | 111 |

Note: Of the 25 refused High School diplomas, 22 were granted certificates of Honorable Mention. Of the 86 refused Grammar School diplomas, 46 were granted certificates of Honorable Mention.

Probationers in High Schools.

| No. of pupils who entered the High Schools on | | | in | Septe | m- | |
|--|-----|---------|------|--------|-----|-------|
| ber, 1890 | | | | | | 177 |
| No. of these who left school before the close of | the | year | | | | 58 |
| No. who were allowed to remain in school. | | | | | | 117 |
| No. whose probation was closed in June, 1891 | • | | ٠ | • | • | 2 |
| No. of graduates from the Grammar Schools in | Jur | ne. 189 | 1. v | vlio w | ere | |
| allowed to enter the High Schools "clear" | | | | | | 1,940 |
| No. of graduates from the Grammar Schools in | Jun | ie, 189 | 1, v | vho w | ere | 450 |

allowed to enter the High Schools on probation .

473

