## Maine State Legislature

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# Public Documents of Maine: 

BEING THE

## ANNUAL REPORTS

of the various

## Public Officers and Institutions

FOR THE YEAR
1897.

VOLUME IV.

## REPORT

OF THE

# STATE SUPERINTENDENT 

OF

## COMMON SCHOOLS

OF THE

STATE OF MAINE

FOR THE SCHOOL YEAR

Ending June 1, 1896.

AUGUSTA :
BURLEIGH \& FLYNT, PRINTERS TO THE STATE. 1896.

## STATE OF MAINE.

## Educational Department, Augusta, December 31, 1896. $\}$

To Governor Henry B. Cleaves, and the Honorable Executive Council:

Gentlemen:--In accordance with the requirements of Chapter 7, of the Resolves of 1895 , I respectfully submit the following report of the condition and progress of the public schools of Maine for the school year 1895-6.

Very respectfully
Your obedient servant, W. W. STETSON,

State Superintendent of Common Schools.

## REPORT.

## SPECIAL STA'TISTICS FURNISHED BY TOWN SUPERIN'TENDEN'TS WITH COMMENTS ON THE SAME.

The increasing demand for Reports of towns and cities, and of the departments of the State and Nation, shows an increasing interest in these documents. Until recently these volumes were used for scrap-books or waste paper by those who had no official interest in the subjects discussed. At the present time a large number of persons are reading these studies, with an interest and carefulness which mark a new era in this field of labor. The student of school problems studies these documents as carefully as he formerly conned his text-books, and considers his library incomplete without sets of the best reports in all the departments in which he is directly interested, or with which he is in any way associated. The progressive teacher of to-day realizes that these volumes contain material with which it is necessary for him to be familiar, if he is to perform his work to the satisfaction of those for whom he is laboring, and in such a manner as to place himin line with those who are doing the best service in his field of study. School officials realize that they owe much to those who are engaged in this work, and that it is a part of their duty to place within the reach of their co-laborers the data to which they have access. Many magazines of commanding influence are discussing the school question, and are submitting the statistics gathered $l y$ them to men of eminent stand-
ing in the profession for analysis and comment. The newspapers of the country open their columns to private citizens, as well as officials, for discussion of all questions connected with the schools. These papers have voluntarily entered the field, and, with the assistance of experts, have collected facts, discussed the same, and made suggestions which have resulted in material changes in the administration of the schools. All these efforts mean a revival of interest in the school of to-day, in all its relations.

This department, in its last annual report, gave an extended account of a personal inspection of a large number of rural schools, located in eight of the sixteen counties of the State. This study was made and published for the purpose of placing clearly before the people of the State, such facts in relation to the schools as would enable them to form an intelligent idea of their physical, mental, and moral condition. It was not a pleasant task to prepare these records. The reading of the document could not have been gratifying to those who have been accustomed to hear our school system and schools spoken of as models in form and administration. The typical school report refers to these subjects in terms which indicate that the schools are steadily improving, and that the people are to be congratulated upon the marked progress which has been made. The stereotyped statements are : "The parents are interested in the school, the children are regular in their attendance, attentive to their studies, and making rapid progress in their work; that the teachers are alive to their duties, progressive in their spirit, and skillful in giving instruction." These comments are so generally made that when the reader reaches this section of these documents, he can recite the sentences without going on with an examination of the text. These panegyrics have ceased to state the facts in regard to the schools. They have certainly ceased to attract the attention of persons who read these reports, except to call forth a sarcastic comment upon the repetition of the stock platitudes. It is a matter of importance that they have ceased to fairly represent the present condition of the schools.

It is no longer true that the majority of the parents are interested in the public schools, and eager and ambitious for their advancement. Statistics show clearly that children are not regular in their voluntary attendance, and are not absorbed in their student work. And the testimony of all persons who are familiar with the facts is practically unanimous upon the point that we have many teachers who are conspicuously unfit, intellectually, scholastically and professionally for the service they are attempting to render. Since all these things are true, and are known to be true by those who have given this matter careful attention, it is for the interest of everybody that the truth be told.

The schools of Maine are of such quality that the people can afford to know all the facts concerning them. The old red schoolhouse of the Pine Tree State has furnished opportunities for the training of so large a number of men and women who have occupied distinguished positions in this and other states as to amply vindicate its influence, power and usefulness. The number of persons who are natives of this State and who have served with distinction as cabinet officers, members of congress, governors of other states, etc., is so large that no one should be sensitive about any criticisms which may be made upon our public schools. When we add to this notable list the multitude who have gone forth from their Maine homes to make for themselves honorable places in the professional, industrial, scientific and literary world, we are certainly justified in feeling proud of the institution which has prepared these people for their work and contributed so largely to their success. It is known to but few how large a concourse of persons have gone from this State and stand to-day in the front ranks of the progressive men and women of the different communities in which they have found their fields of labor. The large majority of these people received the best, and in many instances the most of their training in the common schools. The old academy, seminary and the colleges of Maine have done a work
unparalleled in fitting those who came under their instruction for positions of distinguished usefulness. They have done this work so well that it is natural for many to regret that, with only a few conspicuous exceptions, the academy and seminary have passed out of existence; but they rejoice that the colleges remain, developed by years and strengthened by larger endowments and better equipments.

A people who are weak, and conscious of their weakness, are peculiarly sensitive to an exposure of their frailties. Any people who are strong, and conscious of their strength, welcome any revelation which helps them to a better knowledge of themselves and better means of development. Believing that the people of Maine are capable of establishing, maintaining and intelligently using the best schools of the age, an effort has been made to place before them, verbally and pictorially, the condition of the schools of the State. These studies have not been undertaken for the purpose of proving any theories, gratifying any personal ambitions, or placing the State before the country in an unenviable light. The department has been much encouraged in its work by the large number of letters received approving its course and corroborating the statements made concerning the schools. The reports received from the sections of the State which have been discussed are unanimous in the testimony that the descriptions are so conservative in some particulars as to fail in fairly representing the facts.

For the purpose of placing the truth of the statements made beyond all doubt the department decided to submit a list of questions to the superintendents of the several towns and to ask them to furnish answers to the same. These questions cover the occupations of the superintendents, their scholastic attainments, their professional training and experience, the methods used by them in the performance of their official duties, the size and condition of their school-yards, outhouses and school-buildings, the appliances furnished for school work, and their opinions of the intellectual quality,
scholastic and professional training, of their teachers. Besides these questions they were asked to give their decisions upon what persons, organizations and influences are helpful or harmful to the schools. In addition to all these items they were requested to express themselves upon what changes are needed in the school law, if they are in favor of having teachers examined by State officials, and if they have any schools which come within the list described as "poor" or "very poor" in the last report of this department.

Below will be found the circular which was sent to the local superintendents of schools.

## STATE OF MAINE.

Edecational Departnent.
Avgusta, August 31, 1896.
To the Superintement of Schools:
Will you please fill the blanks found below, and return this document to the State Superintendent on or before September 19, 1896. The information which you furnish is for the use of this department, and I hope your answers will be entirely frank as your name will not be made public. Nay I urge you to give this matter your immediate attention.
Town,
County,...........................
Name,
Age,...............................
Post-office address,
My regular business (or profession) is
Have attended common schools,...................terms.
" high school,...................... "
:" academy or seminary,............ "
" normal school, ................... "
" college or university,.............. years.
Was graduated from
Have taught in common schools,..............terms.
" high school, .................. "
" academies or seminaries, ..... "
" normal schools,.............. "
'Taught my last term of school in 18
I have been supervisor or superintendent of schools for ..... years.
I have been supervisor or superintendent of schools in this town for years.
I have been supervisor or superintendent of schools continuously for years.

Have found the following books on teaching helpful in my work as superintendent,

Have found the following educational papers helpful in my work as superintendent,

The number of teachers in this town who have been examined at a public examination conducted by the superintendent, in all the studies required by the statutes, and have received an average rank of not less than seventy-five per cent. on their papers is

I made..............visits to the schools of my town during the spring term of 1896.
In what ways did you try to assist the teachers in their work?.

In what ways did you try to aid the children in their studies?

Are you using a Course of Study in your schools?
How many of your teachers are using the Course of Study prepared for the public schools of Maine and published in the State Superintendent's Report for 1895?

How many school yards have you in your town less than 75 feet square?
How many school yards have you that are between 75 and 150 feet square?

How many schools yards have you that are more than 150 feet square?
How many of your outhouses are in poor condition?.....; fair?......; excellent?

How many of your schoolhouses are in poor condition?....; fair....; excellent?

How many of your schoolhouses have plank desks?.......... ; modern desks?

How many of your schools are supplied with maps?
How many of your schools are supplied with charts?
How many of your schools have libraries?
How many of your schools have some apparatus?
Have you purchased, or do you intend to purchase during the year, new desks?....; maps,....; charts?....; library books?.... ; apparatus?.... school books?

How many outhouses have you built or do you intend to build duringthe year?

How many schoolhouses have you built or do you intend to build during the year?.

How many school yards have you improved or do you intend to improve during the year?

How many school yard fences have you built or do you intend to build during the year?

Whole number of teachers employed in this town for present term is..
The number whose legal residence is in this town is.
The number who are relatives of any member of the school committee is
The number who are connected with any member of the sehool committee by marriage, in business affairs, etc., is
The number who have attended a summer school is
The number who have attended any teachers' meetings within a year is

The number who have graduated from high schools is,
The number who have graduated from academies or seminaries is
The number who have graduated from normal schools is
The number who have graduated from colleges or universities is
The number of teachers who have taught in the school in which they are now teaching only one term is......... ; two terms.......... ; three terms........ ; one year........; two years....... ; three years ...... ; four years........ ; five years........; six years........ ; seven years ........ ; eight years........ ; nine years........ ; ten years.
Number who have taught in the same school more than ten years and less than sixteen is........ ; more than fifteen and less than twenty-one ........ ; more than twenty and less than thirty-one........ ; more than thirty and less than forty-one........ ; more than forty and less than fifty-one.......... ; more than fifty years.

Number who have taught only one term is.........; two terms $\qquad$ three terms....... ; one year......... ; two years.......... ; three years ......... f four years......... ; five years......... ; six years.......... ; seven years........ ; eight years........; nine years........; ten years

Number who have taught more than ten years and less than sixteen is $\ldots . .$. ; more than fifteen and less than twenty-one ....... ; more than twenty and less than thirty-one........; more than thirty and less than forty-one........; more than forty and less than fifty-one.......; more than fifty $\qquad$
Number who have taught continuously for only two terms is........; three terms........ ; one year........ ; two years.......... ; three years ...... ; four years...... ; five years......; six years......; seven years ........ ; eight years........ ; nine years......... ; ten years
Number who have taught continuously more than ten years and less than sixteen is........; more than fifteen and less than twenty-one .... ....; more than twenty and less than thirty-one ............; more than thirty and less than forty-one........; more than forty and less than fifty-one....... ; more than fifty

How many of the teachers who taught in your schools during the spring term were not reappointed for the fall term to the same school because they were unsuccessful?


What are the most discouraging things about your schools?.

What changes in the pupils would make it possible for them to derive greater benefits from the school?

In what ways do the parents hinder the work of the school?

In what ways might they assist in making it more serviceable to their children?

In what ways do the churches interest themselves in the schools?.

Does their influence tend to help the superintendent in securing the best teachers and inducing the pupils to do the best work?.

Have the politicians of your town exerted a helpful or harmful influence in the selection of teachers or management of your schools?

Have any other persons or organizations exerted a helpful or harmful influence in the same particulars?

What changes in the school laws of this State would tend to increase the usefulness of the schools?

Are you in favor of a law providing for the examination of teachers by the State on the basis outlined on pages 58 and 59 of the last report of this department?

Have you any schools in your town that are fairly described on pages 22-49 of the last report of this department?.
(Those listed as "poor" or "very poor.")
W. W. STETSON,

State Superintendent of Common Schools.
It may be helpful to those who are not familiar with the school statistics of Maine to know that there are in the State 513 superintendents of schools, about 4,600 teachers, during any given term of school, and that the average length of the school year is 26 weeks, 3 days.

It is a matter of some interest to note that the superintendents of Maine are of such an age as to place them above the criticism of immaturity. Their average age is 39 years, 9 months. The youngest superintendent reporting, is 22 years old, and the oldest is 80 . There are 11 who are more than 59 years and less than 66 years of age. There are 6 who are more than 65 and less than 71. These figures indicate that the young man of the period is not considered eligible for this position in a majority of the towns of the State.

The farmers of Maine are much in evidence as superintendents of schools. The records show that 35 per cent. of these officials are engaged in this occupation; that 21 per cent. are teachers; 7 per cent. physicians; 5 per cent. housekeepers; 5 per cent. merchants; 4 per cent. lawyers; and 4 per cent. clergymen. There are 5 carpenters, 4 lumbermen, 4 laborers, 4 druggists, 3 journalists, 3 fishermen, 3 postmasters, 3 civil engineers, 2 painters, 2 stone cutters, 2 blacksmiths, 1 express agent, 1 bookkeeper, 1 guide, 1 saw filer, 1 surveyor, 1 ferryman, 1 barber, 1 printer, 1 manufacturer, 1 haberdasher, 1 railroad postal clerk, 1 dairyman and 1
"spinster," who are acting as superintendents of schools. Only about 4 per cent. of the superintendents devote all their time to superintendence. The remaining 96 per cent. give to this work such fractions of their time as they are willing to spare from their regular professions or occupations. The above figures indicate that the people of the State are not disposed to select their superintendents from any one class or profession, and that those selected are not expected to have special training or aptitude for their official duties. As a rule the superintendent is chosen from the most numerous class in the community which he is to serve, there being certain conspicuous exceptions which will occur to any one who examines the list.

It is a matter of some curiosity to the examiner of these returns to notice the judgments expressed by different superintendents upon the several questions asked. The opinions advanced by the farmer do not always agree with those expressed by the teacher, the physician, the merchant, the lawyer or the clergyman. It is felt, however, that this variety of expression is peculiarly helpful in getting the point of view of a large number of different men and women in relation to matters of peculiar importance. The influences which modify each person's opinions are helpful in furnishing material for the settlement of any question in which the most of the people are concerned. It is fortunate that in this study the candid judgment of so large a number of different persons, occupying so great a variety of positions, can be used in arriving at conclusions.

The returns show that 16 per cent. of the superintendents have received all their education in the common schools, and that 4 per cent. have not attended any school, either public or private. It is encouraging to know that 58 per cent. of the superintendents have attended high schools for a longer or shorter period; that 50 per cent. have attended academies or seminaries ; 13 per cent. normal schools, and 20 per cent. colleges. It is of still greater importance that only 4 per
cent. are graduates of high schools ; 10 per cent. of academies or seminaries ; 5 per cent. of normal schools, and 14 per cent. of colleges. Those who have been graduated from medical colleges or from the law departments of colleges have credited themselves with being college graduates, and these facts may help to explain the large per cent. under this last item.

The record shows that 65 per cent. of the superintendents have taught in the common schools; 29 per cent. in high schools; 8 per cent. in academies or seminaries, 1 per cent. in normal schools; and 20 per cent. are teaching at the present time. It should be borne in mind that all the superintendents who have taught in the higher schools are included in the 65 per cent. who have taught in the common schools. The recognition of this fact forces upon us the conclusion that 35 per cent. of the superintendents have never had any experience in the schoolroom as teachers.

It helps one to a more satisfactory analysis of the returns to know that 5 per cent. of the superintendents taught their last term within the past year; 3 per cent. within two years; 2 per cent. within three years; 3 per cent. within four years; 2 per cent. within five years; 2 per cent. within six years; 2 per cent. within seven years; 2 per cent. within eight years; 2 per cent. within nine years and 1 per cent. within ten years.

Seven per cent. have not taught for more than 10 and less than 15 years; 6 per cent. have not taught for more than 15 and less than 20 years; 2 per cent. have not taught for more than 20 and less than 25 years; 2 per cent. have not taught for more than 25 and less than 30 years; 3 per cent. have not taught for more than 30 and less than 40 years ; and 1 per cent. have not taught for more than 40 years.

The average time which these officials have served as superintendents of schools is 3 years and 3 months. The average time for which they have served in the towns in which they are now superintendents is 3 years and 4 months ; and the average time for which they have served continuously is 2 years and 6 months.

Sixty-cight per cent. of the superintendents report that they have not read any books on the science or art of education; 14 per cent. have read one book; 10 per cent. have read more than one book, but not a large number ; and 8 per cent. have read a large number of books upon these subjects. Sixty per cent. state that they have not read educational papers or magazines; 20 per cent. are reading one educational paper; 14 per cent. are reading more than one paper ; and 6 per cent. are reading several papers.

The superintendents report that they have examined 68 per cent. of their teachers at public examinations in all the studies required by the statutes, and that these teachers have attained an average rank of not less than 75 per cent. in their examinations.

It appears that the superintendents have made an average of 19 visits to the schools of their towns during the spring term of 1896 . This gives at least two visits to each school in an average of 9 schools in each town. Forty-five per cent. of the superintendents are using a course of study, and 19 per cent. of the teachers are using the course of study prepared for the public schools of Maine by the State Superintendent of Common Schools. This is quite a remarkable showing when it is remembered that this course of study was not issued by the department until March, 1895.

An examination of the conditions which obtain as to the school property of the towns shows that 9 per cent. of the school yards have no limits that could be discovered by the superintendent; that 30 per cent. were less than 75 feet square; that 39 per cent. were between 75 and 150 feet square; and that 22 per cent. were more than 150 feet square.

Twenty-four per cent. of the outhouses are reported as being in poor condition; 49 per cent. as in fair condition; and 27 per cent. as in excellent condition. A personal examination of some of the buildings reported as in "excellent condition," has revealed the fact that some superintendents consider an out-building "excellent" which has a door that
can be closed, and windows in which there are no broken panes, but which is not supplied with vaults. Many buildings that have no interior finish except the rough frame are listed as belonging in this class. This explanation may serve in giving a better idea of what is considered as essential in an outhouse, and will also convince any one of the necessity of very radical changes of sentiment upon this matter. The fact that superintendents were willing to report that about one-fourth of all the outhouses in the State are in such condition as to be listed as "poor" is sufficient to bear out the very severe statements that were made upon this subject in the last report of the department.

Twenty-two per cent. of the school-houses were returned as in poor condition; 52 per cent. as in a fair condition; and 20 per cent. as in excellent condition. The explanations which have been given above in regard to outhouses, to some extent, apply to school-houses as well, although not with the same emphasis as to the former buildings. It is learned from the returns that 59 per cent. of the schoolhouses are provided with plank desks, and 41 per cent. with modern desks. By the term "modern desk" is meant the desk which is furnished by some reputable school furniture company, and is usually constructed of iron supports with board tops and receptacles for books; the chair being made of wood and the standard of iron.

It is of some interest to learn that 60 per cent. of the schools are supplied with maps; 59 per cent. have charts; 24 per cent. have some miscellaneous apparatus; and 6 per cent. have supplied themselves, or have been supplied by the towns, with libraries. It should be a matter of considerable concern to people who look to the public schools to furnish the children with such training as will help them to be the best citizens, that so large a number of the schools are not provided with the necessary appliances to enable them to conduct their work in the most efficient way. Unless a school is supplied with maps, charts, apparatus, or books for supplemen-
tary workit cannot do the best service for the children in giving them such instruction and inspiration as will help them to grow into worthy and helpful members of society. It is encouraging to learn, however, that 4 per cent. of the superintendents are to purchase modern desks during the present year ; that 3 per cent. are arranging to purchase maps; and that 11 per cent. are to purchase more school books. One is not particularly impressed with the information that only 7 per cent. of the towns have arranged to build or repair outhouses, and that only 4 per cent. are to repair or build school-houses; but evidence that improvements are to be made is indicated by the fact that 12 per cent. of the superintendents are to improve the school yards, and that 5 per cent. are arranging to build new fences during the present year.

It is interesting to note that 71 per cent. of all the teachers employed in the schools of Maine are legal residents of the towns in which they are teaching; but it causes a chill of apprehension to discover that 12 per cent. of all the teachers are relatives of the superintending school committee, and that an additional 5 per cent. are related by marriage or associated in business with these officials in such a way as to give these teachers an unsafe influence in securing their appointments. It will be seen from these figures that 17 per cent., or a little more than one-sixth of all the teachers of the State, are connected with the members of the superintending school committees in such a way as to give them an undue advantage over other applicants in securing positions in the schools. Seventeen per cent. of the population of Maine is 112,384 persons. There are something over 2,000 members of the superintending school committees of the State. It must be quite clear to any one who examines these figures that the superintending school committees are placing in the schools a much larger per cent. of those who are related to or associated with them, than their fractional part of the population of the State justifies. If we allow 2,000 members for the superintending school committees, and allow each member three relatives who are eligible for positions as teachers, and esti-
mate the voting population of the State to be 108,000 , then the superintending school committees may place in the schools 95 teachers who have some consanguineal or financial claims upon them. But as a matter of fact, they have about eight and one-third times this number.

It is possible that these facts help to account for the schools which were listed in the last report as "poor" or "very poor," and for the additional fact that 38 per cent. of the teachers of the State have not been required to submit to the examinations required by the statutes.

It is a matter for congratulation that 27 per cent. of the teachers have attended Summer Schools. But a school official could not be enthusiastic over the fact that only 56 per cent. of the teachers have attended any teachers' meeting within a year, and that hence 44 per cent. of the teachers are not enough interested in their profession, their work, their personal or professional improvement to attend these gatherings.

It is reported that 34 per cent. of the teachers are graduates of high schools; 18 per cent. are graduates of academies or seminaries ; 13 per cent. are graduates of normal schools; and 4 per cent. are graduates of colleges or universities. In studying these figures, it is necessary for one to remember that many of the graduates of normal schools are also graduates of high schools or academies, and that all the graduates of the colleges are also graduates of high schools or academies or seminaries.

No one can help being alarmed by the fact that 28 per cent of the teachers of the State have taught only one term in the school in which they are now teaching; that 20 per cent. have taught only two terms; 11 per cent. three terms; 8 per cent. one year; thus making 67 per cent. of the teachers of the State who have taught only one year or less in the school in which they are teaching at the present time. A tenure of office so short as the above figures indicate must mean one of two things; either the teachers are so inefficient, or school officials are so captious in their employment of teachers that more than two-thirds of the teachers are forced to become ped-
agogical tramps. No one would be willing to use so harsh a sentence in regard to so worthy a body of people. But the figures furnished by the officials who have direct knowledge of existing conditions, and who must, at least, bear one-half of the responsibility of these frequent changes, make no other statement sufficiently plain to represent the condition of affars.

It is more interesting than encouraging to learn that 6 per cent. of the teachers have taught only two years in the same school ; 4 per cent. three years ; 2 per cent. four years ; 11-2 per cent. five years; and $11-3$ per cent. six years; 11 have taught only seven years in the same school ; 10 have taught eight years; 8 have taught nine years; and 21 have taught ten years in the same school. Thirty-five have taught more than ten years and less than sixteen years; 9 have taught more than fifteen and less than twenty-one years; 8 have taught more than twenty and less than thirty-one years in the same school. If these last numbers could be multiplied by fifty, we should have a condition of affairs of which we should be proud, and of which our schools would show the beneficial results.

There are some other statistics along this line which are not particularly gratifying. The reports show that 9 per cent. of the teachers have taught only one term ; 7 per cent. have taught only two terms; 6 per cent. only three terms; and 6 per cent. only one year; thus making 27 per cent. who have taught one year or less. The record does not improve as we go on, because it is shown that 8 per cent. have taught only two years; 8 per cent. three years ; 6 per cent. four years; 7 per cent. five years; 4 per cent. six years; $21-2$ per cent. seven years; 3-4 per cent. eight years; 2 per cent. nine years; and 2 1-4 per cent. ten years. It further appears that 5 per cent. have taught more than ten years and less than sixteen years; 2 i-4 per cent. have taught more than fifteen and less than twenty-one years; 11-2 per cent. have taught more than twenty and less than thirty-one years; while 10 have taught more than thirty and
less than forty-one years; and one has taught more than fifty years.

The next items fail to give the comfort for which lovers of the public schools must be looking. The superintendents report that 22 per cent. of the teachers have taught only two terms continuously; 12 per cent. three terms; 11 per cent. one year, or that 45 per cent. of all the teachers of the State have taught continuously for one year or less. The record continues to be disappointing when it reveals that 13 per cent. have taught continuously for two years; 9 per cent. for three years ; 6 per cent. for four years ; 5 per cent. for five years; 4 per cent. for six years; 2 1-2 per cent. for seven years; $23-4$ per cent. for eight years; 1 per cent. for nine years; 13-4 per cent. for ten years. It appears that 3 per cent. have taught more than ten and less than sixteen years; 1 per cent have taught more than fifteen and less than twenty-one years; while only 13 have taught more than twenty and less than thirty-one years; 2 have taught more than thirty and less than fifty-one years; and 1 has taught fifty yoars continuously.

The account is not improving when superintendents have to report that 7 per cent. of the teachers were refused reappointment because they had proved themselves unfit for the positions which they held during the spring term ; but we are glad to learn that 9 per cent. declined reappointment from various causes, some to join the married majority and others to continue their studies in higher schools.

It is not creditable to the teachers of the State that the superintendents are obliged to make record of the fact that only 62 per cent. of the instructors of the youth have ever read any books on the history, science or art of education, leaving 38 per cent. who have never read any book upon any of these subjects. A somewhat improved condition of affairs is shown by the statement that 47 per cent. of the teachers of the State are at the present time reading books upon some of these subjects, leaving 53 per cent. who are failing to respond to the calls of the age, and are not doing what they
should to fit themselves for the service they are supposed to render. It is a curious fact, rather than one flattering to the teachers, that only 22 per cent. are reading educational papers or magazines, and that 78 per cent. are making no use of these modern helps in giving instruction.

But this disappointing record is somewhat relieved by the peculiarly gratifying report of the superintendents that 75 per cent. of them are in favor of having teachers examined by a State Board of Examiners as outlined on pages 58 and 59 of the last report of this department, and that only 14 per cent. are opposed to such an examination, while 3 per cent. are undecided, and 8 per cent. failed to give any reply to the question.

The department regrets that it is necessary to make record of the fact, that $402-3$ per cent. of the superintendents, report that they have schools which are fairly described by the account which is given of the "poor" or "rery pool" schools on pages 22-49 of the last report. In making a personal inspection of the rural schools, the State Superintendent purposely selected sparsely settled towns, and schools that might properly be classed as "back districts," and it was, therefore, felt that the statements made were more severe than the general condition of the schools would justify. But it is a curious coincidence that several hundred reports, made by as many different persons, give a per cent. which is substantially the same as the one given in the report referred to above. But the record is somewhat modified by the fact that 13 per cent. of the superintendents are in doubt whether they have schools which would properly be listed in either of these divisions, so that the estimate made by the local superintendents who have the largest possible opportunities of knowing their schools is a number of per cent. higher than that given by the department. It is therefore apparent that the statements made in the report of 1895 , are more than justified by the facts. Twenty-one per cent. of the superintendents reported that they had no schools which were fairly
described by the pages referred to above, and 25 per cent. failed to give any replies to the question.

These items make it quite clear that the department has been conservative rather than radical in its estimate of school conditions.

Below are given the titles of papers, magazines and books which have been read by some of the superintendents of the State. The list is a peculiarly interesting one as it shows that some of the superintendents are making great efforts to prepare themselves for their work.

## PAPERS AND MAGAZINES.

Maine Teacher; School Bulletin; Practical Educator; Public School Journal ; New York State Educational Journal ; Teacher's Out-Look: School Review; Education; Educational Review ; Normal Instructor ; Teacher's Guide ; American Teacher; School Board Journal; Teacher's World; Popular Educator ; Primary Education ; Northwestern Journal of Education ; School Journal ; Teacher's Institute ; Primary Teacher; New England Journal of Education; New Education ; Normal Worker.

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Psychology in Education, Roark; Psychology Applied to the Art of Teaching, Baldwin ; Apperception, Lange ; Essentials of Methods, De Garmo ; Theory and Practice, Brown ; Methods in Geography, King ; Theory and Practice of Teaching, Page ; School Supervision, Pickard ; Lectures on Teaching, Compayre; Evolution of Dodd, Smith; Education as a Science, Barns; School Economy, Wickersham ; Methods of Instruction, Brooks; Elements of Pedagogy, White; Helps in Teaching Reading, Hussey ; Literary Land Marks, Burt; Psychology of Number, McLellan \& Dewey ; Horace Mann's Works; Educational Reformers, Quick; Normal Methods, Brooks; Chips from a Teacher's Workshop, Klemm ; Methods of Teaching, Swett ; Contribution to the Science of Educa-
tion, Payne; School Management, White ; Practical Hints to Teachers, Howland; School Interests and Duties, King; Public School System, Rice; Education, Spencer; School Management and Theory and Practice, Ranh; Courses and Methods, Prince ; Manual of ObjectTeaching, Calkins ; Lectures on Teaching, Fitch; Talks on Teaching, Parker; Mistakes in Teaching, Hughes; Hand-Book of Psychology, Sully ; Principles and Practice of Teaching, Johonnot ; Teaching the Language-Arts, Hinsdale ; Way-Marks for Teachers, Arnold; Manual of Geography, Frye; Normal Methods, Holbrook; History of Pedagogy, Compayre; The Philosophy of Education, Rosenkrans; Mental Science and Culture, Brooks; History of Education, Painter; Science of Mind Applied to Teaching, Hoffman; Walks and Talks, Smith; Essays of, Fredrick Harrison ; How to Teach, Calkins, Harrison and Kiddle; Grube Methods, Seeley; Education of Man, Froebel ; Pedagogics of the Kindergarten, Froebel ; Life and Works of Pestalozzi, Krusi ; Psychology, James ; Essays of, Burroughs; Essays of, Emerson ; Methods of Teaching History, Hall ; School Supervision, Payne.

In condensing the replies of the superintendents to the following questions it has been necessary to compress more than 650 pages of manuscript into comparatively narrow limits. In performing this task a special effort has been made to retain the language used by the superintendents, as far as possible, and at the same time include the ideas and suggestions which were so frequently repeated as to be entitled to special prominence. Where the exact words of the superintendent are used they are inclosed in quotation marks, and are not necessarily expressed by any one except the person quoted.

The following replies were $g_{i v e n ~ t o ~ t h e ~ q u e s t i o n, ~ " I n ~ w h a t ~}^{\text {a }}$ ways did you try to assist the teachers in their work?"

By classifying the pupils, urging teachers to omit unprofitable work, hearing recitations, and making the teachers feel that they have the support of the superintendent.

By making suggestions as to methods to be used in teaching special studies, assuming the responsibility of disposing
of special cases of discipline, urging the teachers to make a special study of the needs of the individual pupils, and defending them when criticised by captious or unprincipled parents.

By furnishing them with educational books, papers and other helps.

By informing them in what particulars they fail, and commending their efforts to improve.

By assisting them in planning the work to be done, and giving them suggestions as to what course to pursue under given circumstances.

By insisting that good order should be maintained, and that the best methods should be used.

By holding teachers' meetings, and having discussions of school management, methods to be used in teaching given subjects, and how to improve schools along the lines in which they are unsatisfactory.

By insisting that the pupils shall attend regularly, and if possible, have them do so because of a kindly feeling toward the school and the teacher.

By requiring the teacher to be punctual in opening and closing school and urging them to be courteous in their intercourse with the children.

By using the questions furnished by the State Superintendent, and indicating specifically, through their aid, in what particulars they are successful and in what particulars they fail.

By consulting them in regard to their school needs, and giving advice, and trying to stimulate the parents to give them a more cordial support.

By suggesting what books, papers and articles they should read, and inquiring of them as to the help which they derived from reading the same.

By furnishing them with books on education for supplementary work in the various branches, and assisting them to provide themselves with teachers' papers and magazines.

By showing a personal interest in the school, its work, the methods used, and the progress made.

By insisting that the teachers be alert, and up with the times professionally and scholastically.

By providing complete selections from the standard authors for the reading classes, instead of the more advanced reading books.

By having the pupils understand that they are to obey promptly all rules prescribed by the committee, or laid down by the teacher.

By being straightforward, candid and honest in all my dealings with, and criticisms and commendations of the teachers.

By insisting that the teachers shall use the Course of Study prepared for the public schools of Maine.

By insisting that the teachers shall grade their schools as rapidly as they can do so, without interfering with the advancement of the individual child.

By insisting that when a teacher leaves a school she shall leave a detailed statement of the studies pursued, the names of the members of each class, and the point to which each class has advanced, with such comments as will enable the teacher who succeeds her to take up the work without loss of time.

By helping them to prepare exercises and topics for regular recitations, and for special work.

By visiting the parents, and urging them to visit the school, and indicate to the teacher that she has their sympathy and support.

By emphasizing the importance of language work in all studies.

By preparing lists of questions on current events, civil government, physiology, hygiene, nature studies, etc.

By revising programs, and fixing standards for promotion, advising in regard to length of lessons, and making suggestions as to what to do with pupils who are backward in their studies.

By urging the teachers to attend town, county and State associations, and informing them where they can get aids and helps for their regular work.

By insisting that they shall take the International Teachers' Reading Course.

By furnishing them with such apparatus as the means of the town will permit, and making suggestions as to how they and their pupils can construct additional apparatus.

By cordially and resolutely supporting them in cases of discipline.

By insisting that they shall pass an examination in pedagogy before they receive their certificates.

By insisting that the teachers shall feel a personal responsibility in the care of all school property, and report promptly to the superintendent any vandalism on the part of any pupil or person.

By furnishing necessary reference books, and giving talks and explanations on how to use them.

By insisting upon frequent and thorough reviews.
By providing the best text-books the market affords, and in such quantities as will enable the school to do its work in the best way.

By being loyal to the teachers and speaking kindly of them whenever I meet pupils or patrons of the school.

By indicating to them that I do not expect them to reform their schools during the first week of the term, but that if they have accomplished something, they should have the courage and patience to continue in the good work.

By developing an interest in supplementary reading, by questioning the pupils as to what they have read, and what they think of it when I visit the school.

By trying to impress upon the pupils the idea that they must work out their lessons, and not depend upon their parents, their older brothers or sisters, or the teacher ; and that perfect lessons are entitled to very high commendation.

By urging teachers to keep their school-rooms tidy, and decorate them with inexpensive pictures and other material which they or their children can provide.

By making the teacher feel that she should be an example of all that she desires the pupils to become.
"By showing that I have an interest in the pupils as individuals, and by recognizing promptly whatever of progress they may have made."

By endeavoring to create an enthusiasm for the school.
By showing pupils in every possible way the advantage an education will be to them.
"By joggling the teacher who is jogging along contentedly in well worn ruts."
"By discassing the State Course of Study with the teachers, and explaining why it should be used, and how to use it."

By asking teachers to read certain books, and then questioning them on what the books say in regard to certain subjects.

By making the parents, teachers and pupils feel that I have a personal interest in all the details of the school that are of value or importance to them.

By asking the pupils to send me samples of their best work, and filing the same for future reference or exhibition.
"By stimulating a wholesome rivalry between different schools."

By making many short visits, and having the teacher and pupils feel that I am liable to drop in at any time rather than to make a few long visits, which shall be understood as completing the inspection.

By being prompt, hearty and emphatic in all my commendations of the teacher and the pupils, and by making these commendations directly to them or in their presence.
"By refusing to criticise the teacher in the presence of the pupils or any person living in the community in which she teaches."

By urging the teachers to take up special subjects, try new methods and introduce special features, as quotations, recitations, author's days, current and important events, etc.
"I am afraid I have not been of much help to my teachers."

By urging parents to support the teacher in the requirements which she makes of their children in the studies they shall pursue, the amount of work they shall do and the way in which they shall conduct themselves in and out of school, and by showing the parents, so far as I can, the evils of criticising the teacher in the presence of their children.

By showing the teachers that they must have a genuine interest in and affection for their pupils, and that they must make a careful study of them as individuals, and adapt the work and methods to their capabilities.

By having the school rooms, furniture, appliances and apparatus put in first-class condition, and then insisting that the teacher and pupils shall protect them from unnecessary wear and tear.
"By insisting that the pupils shall advance only as fast as they can do the work thoroughly, and by showing the teachers and pupils that I place a much higher estimate on thoroughness and skill than I do upon the number of pages which they have 'gone over.'"

By insisting that pupils shall study the subjects which their previous training and present capabilities fit them to study with profit.
"By visiting the schools at least once a month, and staying all day in each room, and making a note of all mistakes, and calling the attention of the teacher to the same after the school has closed."

By insisting that the teachers shall drill the pupils on subjects in which they are specially deficient.

By giving the teacher a detailed account of the school she is to teach, and indicating to her the character and quality of the work she is expected to perform, and then see that she carries out the instructions.

By requiring pupils to pass a satisfactory examination before joining any given class, and by insisting upon a similar examination before they are promoted to the next higher class, and "by refusing to yield to childish caprice and senseless ambition in choice of studies."

By urging the teachers to give such instruction, directions and suggestions in manners as will help the children to abandon the coarseness of conduct and vulgarity of speech used by so many children of the present day.

By urging teachers to give moral instruction through example, precept, quotations, sketches of worthy men and women, etc.

By allowing teachers to visit other schools during each term, and having them report on what they saw that they approved and could use in their schools.

By forming teachers' reading circles, and discussing some standard work on education.

By asking them to read the report of the State Superintendent for 1895, and questioning them about the points in which their schools are like the schools therein described.

The following replies were given to the question, "In what ways did you try to aid the children in their studies ?"

By assisting the teacher in keeping them interested in their work, by taking a personal interest in each pupil, and encouraging the different pupils to do special work along the lines in which they show special aptitudes.

By asking questions about books or papers which they had read, and the studies which they were pursuing.

By urging them to do work along particular lines not covered by the text-books studied.

By judiciously praising the children for the efforts which they made to master their work.
"By offering a silk banner to the school that handed in the best written work in the regular studies, and was most thorough in their reviews for the entire term."

By insisting that the pupils shall take the studies prescribed by the superintending school committee, and that they shall pass satisfactory examinations before being promoted to a higher grade.

By urging them to be prompt and regular in their attendance.

By explaining and illustrating to them the value of an education.

By stimulating them by precept, anecdote, story and citation to make the best use of their time while in school.

By urging them to rely upon themselves, concentrate their attention upon their work and be unwilling to receive aid in doing anything which they can possibly do without assistance.

By making them feel that they are furnished the best opportunities the means of the town will allow.

By trying to awaken in them an ambition to excel, and a desire to go on to some higher school.

By interesting them in the books, appliances and material furnished for the school, and developing in them the feeling that they are responsible for its care.

By showing them the wisdom of studying more things than are found in the text-books, and that it is more important to master a few things than to have a superficial knowledge of many subjects.

By testing them with oral and written questions.
"I fear I am not of any help to the children in our schools."
"By trying to arouse a friendly rivalry among the schools, and letting the pupils see that their attempts to succeed are noticed and appreciated."

By furnishing them with the best teachers that I can employ.
By showing them that I have a personal interest in their advancement.
"By making suggestions as to methods of studying and memorizing."

By encouraging them to have a definite aim and to be exact in all their work.

By stimulating them to observe the forms of nature about them, and to ask questions of their teachers, parents and friends about the things they see.

By meeting them socially so far as my opportunities will permit.

By interesting them in accomplishing a definite amount of work before a certain time.

By subjecting them to thorough and carefully considered tests in the several branches and along the different lines in which I have requested them to make investigations.

By having them feel that they are liable to be examined at any time upon any subject, and hence the importance of frequent and thorough reviews.

By preparing lists of questions for them to find answers to.
By showing them how their studies may be connected with and helpful in their outside work and interests.

By giving informal talks upon subjects in which I wish them to be interested.

By encouraging them to use their spare moments in making a careful study of some subject, calling their attention to the work which has been done by some men by using their odd minutes.

By insisting that all work in the lower grades shall be illustrated by charts, sand-boards or other material.

By asking them to discover the reason for certain things which are found in nature.

By impressing upon them the importance of mastering the work they are required to study in the lower grades.

By showing them that the teacher is their friend, interested in their progress, and has an ambition to assist them in their studies.

By showing them the importance of acquiring habits of study, and thoughtfulness, and the necessity of caring for their bodies.

By showing them that they can only acquire an education by hard work.

By being careful to speak to them in a pleasant way when I meet them on the street.
"By making especially prominent the practical part of their studies, and showing them in what ways the information they gain may be financially helpful."
"By giving them accounts of places I have visited, and objects of interest I have seen."

By explaining to them the reasons why they should take the course of study as preseribed, and showing the importance of being familiar with all the subjects required.

By correcting errors in statements of facts, use of language, cte., as they are noticed.

By outlining a course of reading for each school, furnishing books for the same, and questioning the children as to what they read.

By outlining some special work outside of school books, suggesting ways and means of gaining information in regard to the same, and examining them on the work they were asked to do.

By using the same general plan for work on noted men, great events, etc.
"By helping them to read between the lines of what they were reading."

By showing them that they have an interest in supporting the teacher, and helping her in her work.

By explaining to them the advantages which follow regular attendance and faithful study.
"By seeing that the truant officer does his duty by the children."

By winning their confidence and good will, and then stimulating them to work.

By forming a personal acquaintance with the pupils, and frequently making inquiries of them as to what work they were doing, and how they are succeeding in it.

The following replies were given to the questions, "What are your teachers' strongest points, and what are the strongest points in their teaching?"

A willingness to do hard work ; the ability to develop selfcontrol in the children, arouse an interest in their studies, and adapt themselves to the different children, different communities, and secure the co-operation of pupils and parents.

Great natural ability, unusual force of character, strong personality and a willingness to co-operate heartily and honestly with the superintendent.

Superior scholastic qualifications, earnestness in the work of the school, practical common sense; tact in dealing with unruly pupils, and clear, understandable explanations of difficult points.

Ability to maintain good order without friction ; love of work ; an affection for children.

The influence they exert because of Christian graces ; enthusiasm in their work; good taste and sound judgment.

A determination to have their pupils thorough in their studies, and added to this unusual faithfulness, unselfishness, perseverance and clear, concise ways of imparting information.

Force of character, self-control, thorough knowledge of modern methods, and that quiet energy which arouses and stimulates the children under their care.

Rare executive ability, a warm sympathy with the troubles of the children, and a desire to have their schools among the best.

Conscientiousness in their work and anxiety to learn the best ways of doing it.

High moral character and ability to gain the love and respect of their pupils.

They feel that character is more important than knowledge, and that the ability to do is worth more than a knowledge of facts.

A disposition to work, and a desire to improve.
"Campaigning for schools."
"Love of money."
Tact and willingness to do what is asked of them, and courage to meet resolutely every difficulty which presents itself.

Peculiar aptness in teaching given subjects.
"The ability to make the most of the best in the children."

Loyalty to themselves, to the pupils, to the school and to school officials.

Thoroughness in knowledge of common school studies.
"Willingness to do everything they can to help the work along."
"Attractive personal appearance and courteousness."
"Ability to bring the smart scholars forward rapidly."
A desire to better qualify themselves for their work.
"Decision, perseverance, energy and love for the work."
Knowledge of how to keep their pupils interested, and ability to devise new methods of giving instruction.
"A willingness to do their best under the circumstances."
Ability to cultivate the powers of observation.
"Leading the children to discover facts for themselves, and giving such supplementary work as will help in broadening the path along which they walk."

The following replies were given to the questions, "What are your teachers' weakest points, and what are the weakest points in their teaching?"

They do the work for the pupils.
They are lacking in scholarship in the common school branches.

They do not know how to direct the children in concentrating their attention upon their work and secure that degree of thoroughness which is essential to good teaching.

They do not know how to grade their schools, reduce the number of classes, and dispatch the work of the school quietly and expeditiously.

They are so ignorant of literature, civil government, nature studies and current events as to render it impossible for them to give instruction of any value in these subjects.

They are lazy, narrow, selfish, and wanting in personality, force of character and influence for good over the children.

They depend too much on text-books, and show a lamentable lack of professional and scholastic training.

They are excitable, divide their attention among many subjects at the same time, are wanting in the ability to discipline the school without friction, worry over trifles, and cannot apply themselves to any subject continuously.

They are devoid of ambition, natural aptitude in teaching, self-control and a willingness to learn from the experience of others.

They do not know how to question pupils, and get the best work out of them.

They are not punctual in attending school, and do not feel the importance of being truthful and honest.

They do not realize the importance of doing thorough work, because they have never done work of this kind themselves.

They are timid, feel that their work is limited to the six school hours, and have no interest in the people of the community.

They are not prepared for their recitations, and do not secure intelligent recitations from the children.

They do not read educational books or papers.
They are wanting in originality, and are careless and heedless in what they do.

They are not careful in their conversation, manners or dress in their associations with the children.

They cannot apply practically the principles taught.
"Want of broad culture, and lack of power in developing the reasoning faculties of children."

Try to cover too much ground, and are not concerned to have the work done thoroughly.

They are too much absorbed in matters which are not connected with the schools to do good work.

They have no ability to devise new ways of doing things.
They do not realize the importance of the positions which they hold.
"'They cannot maintain respectable order, even with harsh punishments."
"They do not use good language."
"They are wanting in tact in managing disgruntled parents and offending pupils."
"They do not know how much of any subject to teach, and where to put the emphasis."
"Lack of knowledge of the child mind."
"Inability to comprehend the natural abilities of the different scholars.
"A lack of general information, together with too much parrot-like recitation and too little original thought."

Inability to deal properly with unruly pupils.
Inability to exert a controling influence for good over their pupils.

Thəy do not know how to give such drill exercises as will insure thoroughness.
"An over-weening estimate of their own capacity."
Lack of system and want of ability to make prominent the essential facts and place the minor details in their proper relation to the subject discussed.

Failure to insist upon accurate work, and inability to tell what little they do know.

Failure to have frequent thorough reviews.
"Do not know the why's of things."
Inability to govern their schools.
They waste their own and the pupils time in trying to have them do work which they cannot master, and fail to insist upon such classification of their pupils as will make it possible for them to do satisfactory work.

They do not begin and close school on time; are not prompt, orderly and systematic in their work.

They have no definite object to accomplish, and do not seem to have any well considered methods of conducting the exercises or giving instruction.

The following replies were given to the question, "What are the most encouraging things in your schools?"

A disposition to study, and a respect for teachers, school officials and parents, and regular attendance.

The co-operation of parents with teachers, and an increase of attendance on the part of the children.

Superior ability in the pupils, and an interest in the school on the part of a majority of the parents.
"That pupils will attend when our school-houses are in such wretched condition."
"Frequent visits to the schools by the farmers in the community."
"An occasional pupil and teacher seem to realize what the school is for."

Improvement in the oral and written use of English.
A desire on the part of the pupils and teachers to do practical work outside of text-books.

Close attention to study, thorough work and good discipline.

Increased attendance in the primary classes; interest and intelligence on the part of teachers, and a desire to be familiar with the best methods.
"A willingness on the part of the people to raise money for school purposes."
"The pupils seem to be learning to think for themselves."
A desire on the part of many pupils to master their work and go on to higher institutions of learning.

A willingness to submit to the rules of the school committee and the directions of the teacher.
"There is no discord among teachers, parents and pupils."
Improvement in theory and practice, and a marked desire to excel.

Punctuality in attendance, ambition on the part of teachers and pupils to have their school rank among the best in town.

Improvement in the buildings, appliances and apparatus furnished for the schools.

Improvement in obedience, manners, language and habits.
"Have succeeded in abolishing tobacco."
"More pupils from the rural districts attend the high school."
"An awakening interest on the part of parents, and a 50 per cent. increase in attendance in the higher grades."

An increasing willingness to work in the studies which they are fitted to pursue.

Broad, keen, active, intelligent and ambitious children.
"The children are willing to do anything for their own advancement."
"A readiness on the part of teachers and pupils to receive and act upon suggestions."

Interest manifested by pupils who have but little or no encouragement at home.
"A general demand that teachers shall be better fitted by training and experience for their work."

A desire on the part of the pupils to complete the regular course and be graduated from the school.
"A realizing sense of the fact that we are not up to date."
An interest in the Course of Study, and a desire to have it adopted and followed.

The teachers are becoming convinced that they must be better scholars and more familiar with modern methods, and more skillful in their instruction.

A desire on the part of the children to conduct themselves in such a way as to secure the approbation of refined and cultured people.
"It is low tide now ; hope to see some improvement in the future."
"Fights." (This answer was given by "a man of peace" and one who practices what he preaches.)
"Earnestness of teachers."
"The number of pupils from this town who are attending higher institutions of learning."
"The members of the superintending school committee are showing a slightinterest in the schools."
"A steady growth in good spirit."
Increased interest in nature studies.
That our children are being instructed in two languages.
"Bright, eager faces that indicate good material."
"That teachers know the peculiar circumstances of each pupil, and help him in the ways in which he needs assistance."
"The introduction of modern methods, and a tendency to employ teachers who have had professional training."

Eagerness for knowledge, and a willingness to make great sacrifices to enjoy school privileges."
"A desire on the part of the pupils to go on to higher institutions of learning."
"An active educational spirit in our community."
"A general up-grade movement in our schools."
The following replies were given to the question, "What are the most discouraging things about your schools?"

Lack of suitable school yards, respectable outhouses, comfortable school-houses and modern school furniture. A supreme indifference on the part of some of the parents to these several particulars.

Ignorant and malicious opposition of some of the parents.
The extent to which children are allowed to spend the time before and after school, and their evenings upon the streets.

Lack of money to provide necessary books, apparatus, appliances, etc.

Scarcity of pupils and unsatisfactory means of transporting what there are.

Lack of energy on the part of pupils, and a desire to leave school at an early age.

A failure on the part of the parents to inform themselves as to whether their children attend school or not.

A lack of interest on the part of the pupils, and an unwillingness to respond to the demands made upon them.
"Stupidity produced by generations of rum drinking, tobacco using and licentious practices."

A willingness on the part of parents and pupils to injure the teacher and school by harsh, unjust and untruthful criticisms.

The inclination of pupils to leave a study before they have mastered it.

Parents fail to encourage their children to continue in school.

Instances of gross disobedience, disrespect and vandalism on the part of pupils.

Failure of the teachers to influence the children to conduct themselves properly on the street, in public places, and in their intercourse with others.

Failure on the part of parents to appreciate the importance of a common school education, and lack of interest in the education of their children, the teachers who have charge of them, the work that is being done, and the results that are being attained.

Willingness on the part of parents to accept an inefficient teacher, provided she is hired at a low salary.
"The natural indolence of the children, and a want of discipline in the home."
"Tardiness, absenteeism, a general spirit of 'don't care.'"
"A lack of the reasoning power in the pupils."
"A tendency on the part of the pupils to let the teacher do the work."

Listlessness and mental incapacity on the part of pupils and teachers.
"Certain parents and citizens in the community are always ready to pick up every little thing in connection with the school that they can criticise, and are not willing to help the school officials and the superintendent in maintaining better schools. A whole book could be written on this subject."
"Indifference of parents, varied sometimes by local feuds and animosities which creep into the school."
"The number of pupils who leave school before they are 15 years of age is alarming."
"A lack of the ability on the part of pupils to concentrate their attention upon the work in hand, and devote themselves continuously to a mastery of the studies they are pursuing."
"We need better educated parents."
"Wont consolidate."
"Schools are gradually growing smaller."
"Nothing very discouraging, but lots of room for improvement."

Failure on the part of parents to co-operate, and a willingness to have a poor school rather than have their children transported to one where they may be well taught.

Too many small schools ; too many classes ; and no desire on the part of parents to improve the school privileges of their children.

Failure to locate the school-houses at such places as to accommodate the largest number of pupils with the smallest distances of travel.
"Bad condition of the school buildings, the entire want of apparatus, and a lack of interest on the part of parents."
"Bad spelling."
"Defective gradation."
"A continual finding fault by a certain class of people we have in town, because of the comfort which they get out of growling."

Failure to care for school property, and particularly textbooks.
"Pupils think they know it all, and parents uphold them in this opinion, and thus prevent the grading of the school and such an arrangement of work as will compel each child to study the subjects which he needs most."
"Lack of money, and little prospect of more."
"A few growlers who think the schools were made for their children only."
"The slowness with which people as a rule accept proposed improvements."

Unreasonable objections to consolidation of schools.
"'Too few pupils to make the school interesting."
"Failure to understand the advantages of the town over the district system, and an insistence on schools in divisions where combinations are necessary."
"The inclination of people to believe that anybody can teach school, and of the town to believe that parsimony in school matters is economy."
"A failure of the town to provide suitable appliances, apparatus and books for school libraries."
"Class feeling, and a desire to rush through their studies without being thorough."
"Unsanitary conditions in and about the school buildings."
The following replies were given to the question, "What changes in the pupils would make it possible for them to derive greater benefits from the school?"

More self-reliance, perseverance, attention to studies and willingness to work.
"Such changes as would make them comprehend that improvement comes from exertion."

An appreciation of the value of an education.
An understanding on their part that the teacher is to be obeyed without question.
"The habit of being truthful."
"A realizing sense of what it means to acquire an education."
"More respect for the teachers, school property and people generally."
"An ambition to do more thorough work even at the risk of being put back."

A desire to depend on themselves and prepare their lessons without assistance.
"A higher estimate of the importance of deportment, honor, courtesy."
"More enthusiastic work and willingness to study outside of school hours, and a feeling that they have got to dig if they get there."

A desire to master what they are studying before they take advanced work.
"Different dispositions as much as anything."
A realizing sense of the value of the privileges they enjoy. "The pupils are all right. The trouble is with the parents."
"A greater thirst for knowledge."
"Stop using rum and tobacco."
"A desire to obtain a good education, which is wanting in the majority of the pupils of this town."
"Greater industry and better training at home."
"A more definite aim."
A desire to know things outside of text-books.
More studious habits, more energetic work, and a higher moral standard.
"More reverence for and politeness toward their teachers."
"I think the pupils are all right; but would do better if surrounded by proper conditions, and encouraged by a more general interest on the part of their parents."

A realization that they should learn lessons for the good which they get out of them, and not for the purpose of reciting them.

A desire to remain in school until they have acquired a good English education.

An interest in good books.
"Study more and run the streets less."
"Fewer social engagements, a less number of appearances in dramatic entertainments, dances, etc., etc., etc."

The following replies were given to the question, "In what ways do parents hinder the work of the school?"
"By finding fault with the teacher in the presence of the children, slandering the teacher, allowing the children to remain at home upon foolish pretexts, and a general don't care spirit about the whole matter."
"If the superintendent or teacher does not please the parents, some will hunt for faults even when they know they are seriously injuring the school."
"Some of the parents do not know what the schools are or should be, and therefore, antagonize the school because of their ignorance."
"By not being in sympathy with the teacher, not interested in the work of their children, and failing to insist upon prompt and regular attendance."
"By indifference or hostility."
"By acting upon the idea that the teacher can make the school what it should be, do her own work and the work of the children, and that she does not need their help or encouragement."
"By acting as though they were from two to ten years younger than their children."
"By upholding their children in bad behavior."
"By interfering with the teacher in her work, unjustly criticizing the methods on the report of the children, without ever visiting the school-room."
"By keeping the boys at home." "It is a misfortune to be born a boy in this land of potatoes."
"By sympathizing with the children in their petty grievances."
"By pretending to believe all their children say when they know they are telling falsehoods, and then forcing the teacher out of school by making things unpleasant."

By insisting that their children shall take the advanced work before they have mastered the work which preceded it.
"By neighborhood quarrels."
"By encouraging the children to have their own way at school."
"By finding fault with every move the teacher makes."
"By not seconding the teacher's efforts."
"By magnifying the teacher's faults as reported by the children when these children rule the home."
"By devising excuses to keep the children at home."
"By allowing their children to rule the home, and encouraging them to do the same at school."
"By taking the part of the children in any trouble at school."
"Usually the parents are divided into two factions; those who are ready to lend a helping hand and those who are constantly putting obstacles in the way."
"By not getting acquainted with the teacher, and not letting the teacher know the defects in their children."
"By always being ready to find fault with everything that is done in the school, and opposing the introduction of new methods which they criticise as new fangled fads."
"By indifference to educational matters in general."
"By wanting their children to go too fast in their studies."
"By their ignorance of modern methods."
"By encouraging the pupils to pursue a whimsical course of study according to their fancy."
"By sending their children to school for sixteen weeks, and into the mills the remainder of the year."
"By opposing the teacher employed because the superintendent did not employ a certain relative of influential famiilies in the neighborhood, whose good influence had long ceased to exist."
"By misjudging and misrepresenting the school because of false statements made by the children."
"By voting against the consolidation of schools."
"By not voting money for free high schools, or books, and only $\$ 25$ for repairs."

The following replies were given to the question, "In what ways might parents assist in making the schools more serviceable to their children?"
"By keeping still until they know that they don't know."
By requiring their children to attend regularly, giving the teacher the benefit of their cordial support, visiting the schools and voting more money to maintain them.

By giving the children proper training at home, and assisting the teacher in her efforts to train them while they are at school.

By furnishing them good reading in the home, and talking with their children about their school work, and showing them that they place a high estimate upon it.
"By a willingness to do what is best for their children."
"By encouraging their children to obey orders, by showing more interest in the teacher and the work done by their
children, and by visiting the schoos frequently enough to be thoroughly familiar with everything connected with them."
"By impressing upon them the necessity of an education."
"By instructing them to obey the teacher and to try to learn their lessons."
"By compelling regular attendance, refusing to listen to their complaints, encouraging them to study at home, and teaching them by example to tell the truth."
"By visiting the schools frequently, and by not criticising' things that they know nothing about."
"By knowing the facts before they sit in judgment upon the teacher."

By showing the children that they have an interest in the teacher and the work she is trying to do.

By allowing no tale-bearing, and encouraging a respect for the teacher, and insisting upon regular attendance.
"By insisting upon the employment of teachers who are better qualified to teach, and by voting more money for repairs."
"By impressing upon the children that they are to attend. regularly and obey the teacher promptly."
"By acquainting themselves with modern methods, and supporting teachers in their efforts to introduce them into the schools."
"By not believing all the reports heard before hearing both sides."
"By insisting that their children shall prepare their lessons each day, and encouraging them to do some of their studying at home."
"By striving to create in their children a desire for an education."
"By extending social courtesies to the teacher."
"By teaching their children good manners at home, and insisting that they shall be courteous to their teacher and schoolmates."

By supplying their children with some good books, and encouraging them to read at home.
"If something could be done to induce the parents to visit the schools, I think it would have a wholesome effect."
"By having the boys and girls understand that they are blest with schools."
"By providing better school-houses, and discontinuing the small schools."
"By exerting a good influence over the children in their homes."

The following replies were given to the question, "In what ways do the churches interest themselves in the school?"
"Not at all."
"None whatever."
"No churches in town."
"No connection."
"In no way."
"Cannot say."
"Not the slightest."
"By opening their meeting-houses for any school purposes, and giving their influence to sustain a high grade of morals."
"By endeavoring to secure Christian teachers, and by throwing their influence solidly on the teacher's side."
"They do nothing."
"By urging parents to send their children to school, and by visiting the schools."
"No active interest."
"I am sorry to say that they do not have the interest in the schools they should."
"In no way that I can see."
"Not to any extent."
"Pastors visit the schools."
"They are all heathens in this section."
"Their influence is not felt."
"We have five churches in the summer, but they have not interested themselves in the schools to my knowledge."
"They provide social entertainments and religious meetings for the children living in their vicinity."
"They take a healthy interest and strive to add to their usefulness."
"Our pastor usually visits the schools as often as once a week."
"Our church is trying to start a free Kindergarten."
"By organizing Sanday schools in the several districts."
"They do all they can to keep up the interest in the schools."
"By urging the children to sign pledges of total abstinence from the use of intoxiating liquors, tobuceo, profanity, etc."
"By urging upon the children the importance of good manners, good morals, regular attendance and faithfulness to their duties."
"Two of our churches hold meetings in recognition of the opening of the school year. These exercises are encouraging and helpful to teachers and pupils."

The following replies were given to the question, "Does their influence tend to help the superintendent in securing the best teachers, and inducing the pupils to do the best work?"
"No."
"No, not directly or indirectly."
"No perceptible influence in any direction."
"I am not aware that they do."
"I think they do."
"Sometimes perhaps, but not often."
"I do not think they take much interest in the schools."
"Just at this time the school shares with the church the opposition of the imps of Satan at __on on_."
"If they used the influence which God gave them, it would be well, but in this age it is laid aside for personal gain."
"As a rule I find the best and most willing workers among the pupils who attend Sunday school and church."
"No; rather the opposite, except so far as each society is anxious to have teachers from its church."
"They help in every good work."

The following replies were given to the question, "Have the politicians of your town exerted a helpful or harmful influence in the selection of teachers or management of your schools?"
"They do not care anything about them, evidently."
"They have neither helped nor hindered."
"Not particularly helpful in any direction."
"They seem to have mistaken ideas of economy, and are ignorant of the best methods, and know little about the best school books."
"Have nothing to do with our schools."
"No influence."
"Are helpful."
"No influence either way."
"They have not interfered."
"No politicians here except myself."
"The politicians are so good that they are unwilling to meddle with the schools."
"The politicians of -_ are a common sense lot, and do not hinder in any way in the management of the schools."
"The influence of the leading men of both parties is helpful in raising money and employing the best teachers."
"No politics in our school work."
"This is a delicate question. The school officers depend upon the politicians for election, and if things are not carried out to suit them, a new board is liable to go in."
"Our town is non-partisan on school questions, and the politicians not only do no harm, but are helpful in securing good schools."
"Political interference in the school of -_ is at a minimun."
"Have no part in the management of the schools of —__."
"Do not mix politics and school matters."
The following replies were given to the question, "Have any other persons or organizations exerted a helpful or harmful influence in the same particulars?"
"The W. C. T. U. has supported the superintendent and given its moral support to the schools."

The King's Daughters have in years past been a help to our schools by assisting needy pupils."
"The Juvenile Lodge of Good Templars has been an unmitigated curse to our public school."
"The Juvenile Templars have been very helpful to our schools."
"The rum hotels and their bums are a blighting curse here."
"The N. P. W. C. T. U. has been very helpful."
"None worth mentioning."
"The Patrons of Husbandry have taken an active interest in the schools, and have helped them-in many ways."
"Yes. There are several which are ever ready to place obstacles in the way."
"In the town of - I find that the grange and the I. O. G. T. help the schools, and I presume they would do the same in __ if they were run as they should be."
"Persons have helped, but organizations have not."
"The grange believes in the school."
"The Good Templars and the W. C. T. U. have been very helpful in teaching temperance."
"Teachers' associations have done a great work in stimulating our teachers to a better preparation for their duties."

The following replies were given to the question, "What changes in the school laws of this State would tend to increase the usefulness of the schools?"
"A repeal of the free text-book law, or else so amend it as to give the books to the pupils absolutely, the pupils to provide themselves with books if unnecessarily destroyed." (3)
"Abolish the school committee, and let the superintendent do the work, as the superintending school committee is simply a board of appeal for grumblers."
"Require members of the school committee to be examined before they are eligible for positions on the board of educa-
tion, and have the examination of such a character as to show whether they are fifty years behind the times or up to date in their ideas of what schools should be." (3)
"Change the law regarding the transportation of pupils from may convey to shall convey." (2)
"Such a compulsory law as will require pupils between six and sixteen years of age to attend school for at least twentyfour weeks during each school year." (4)
"Such a change as will provide for paying the members of school committees for services rendered."
"Such changes as will place the schools entirely under the management of State officials."
"Such changes as will permit pupils to attend high schools in adjoining towns without paying tuition, if high schools are not maintained in their own towns."
"Such changes as will divide the State school fund among the towns on the basis of the average attendance of children attending the schools."
"A law making State examination of teachers compulsory."
"A law permitting towns to unite for the purpose of employing a superintendent of schools, with a provision that the State shall give the towns taking advantage of this law a sum equal to the amount raised for superintendence."
"A law requiring all superintendents to submit to an examination before entering upon their duties."
"A law regulating the age at which teachers may be employed."
"The adoption by the State of a Course of Study, and a provision that towns shall not receive State aid unless the work prescribed is done."
"County examining boards, and graded certificates are the next great reforms needed in our school laws."
"A law compelling towns of more than a certain population to maintain a free high school for a certain number of weeks each year."
"A change in the law increasing the amount of the mill tax for school purposes."
"Repeal of the law abolishing the district system."
"Such a change in the law as will prevent a member of the committee from serving as a teacher."
"A law preventing all towns from receiving State aid if they maintain any school with an average attendance of less than twelve pupils."
"A law placing the rural schools under the charge of county superintendents."
"We have law enough."
"A radical change to a State Board of Education like Massachusetts." (1)
"A law compelling towns to raise more money for school purposes."
"Change section 6, page 5 of school laws so that it would read 'ninety cents' instead of 'eighty cents." "
"A law compelling towns to unite and employ a skilled superintendent."
"A law providing for a uniformity of text-books throughout the State."
"A law requiring all teachers to pass a county or state examination before teaching."
"A law permitting towns to elect superintendents instead of having them elected by school committees." (1)
"A law providing for county superintendents who are specially trained for their work."
"A law forbidding the marriage of good teachers."
"A law compelling towns to furnish respectable schoolhouses."
"A law providing that the erection of all school-houses shall be placed in charge of the selectmen of the town."
"A law providing that superintendents and teachers, when once elected, shall serve until dismissed for cause."
"A law providing that superintendents shall act as truant officers."
"A law reducing the number of members of the superintending school committee to three."
"A law providing for a State Board of Examiners."
"A law requiring towns to furnish necessary apparatus and suitable appliances for the proper conducting of the schools."
"A law providing that no person under eighteen years of age shall be eligible as teacher in the public schools of Maine."
"Repeal of the law giving the town the right to instruct the school committee in the suspension of schools."
"A law providing for a more permanent tenure of office of teachers."
"A law giving to some State official the authority to stop towns from receiving State aid until they have provided suitable school buildings, employed competent school teachers and furnished necessary text-books, apparatus and supplies."
"A law requiring towns which receive State aid to employ teachers holding State Certificates."
"A law to compel teachers to register."
"'The truancy law should have more teeth."
"A law to compel children of shiftless, unthrifty parents to attend school until they have acquired a good English education."

## SUMMARY OF SPECIAL STATISTICN.

It is apparent from these returns that but a small per cent. of the superintendents are giving their whole time to superintendence; and that a large majority devote the most of their time to other employments; that a few of these officials have received the necessary scholastic and professional training to fit them for their labors; but that a majority of them have never enjoyed these advantages. It is equally clear that too large a per cent. of them have never had the necessary experience in the school-room to qualify them to be judges of teachers and their work.

The record shows that only a very small number of these officials have read, or are reading educational books or papers;
and that they, therefore, can know but little about the methods approved by experts in this field of labor. A majority of the superintendents seem to be anxious to assist the teachers and children in their labors, but the most of them seem to have no detinite idea of what to do or how to do it. A few of them made record of valuable and important suggestions in these particulars, but the number is so small as to indicate a lamentable condition of affairs.

A large number of schools are using or are becoming interested in the use of a Course of Study. While it is true that there are some graded school yards, suitable outhouses and excellent school buildings, it is also true that the number is altogether too small, and that the number which does not come up to this standard is much too large. The returns indicate that the towns are failing to do their full duty by the schools in not providing suitable school furniture, necessary apparatus and appliances, and by not making necessary repairs.

An astonishingly large per cent. of the teachers have not received that scholastic or professional training which it is necessary for one to have who is to acquit himself creditably as an instructor. It is evident that many of the teachers are not sufficiently interested in supplying their deficiencies to attend teachers' meetings or summer schools. All of these facts account for the brief tenure of office which is so great a discredit to the teachers of the State. It is cause for serious alarm when it is known that so large a per cent. of the teachers are teaching their first year, that so large a number have taught so few years consecutively, that so few have taught in the same school for any considerable length of time, and that so small a number are retained in the same school for a series of years. It is a very noticeable fact that the professional study and reading of the teachers seem to keep pace with the work done by the superintendents in these particulars.

It is evident from the returns that we have many excellent teachers, capable of doing a high grade of work, but the
returns are entirely clear upon the point that this number is not large, not as large as it should be in a state employing about five thousand teachers each year. The weak points of the teachers may be summarized as want of scholarship, lack of personality, want of professional training and inability to give instruction, inspire pupils and exert a wholesome influence over those with whom they come in contact. The most encouraging things in our schools are good teachers, interested and ambitious children. The most discouraging things are incompetent teachers, parents who are willing to injure the school to gratify personal pique or prejudice, and want of interest on the part of parents, and an indisposition. to work or attend school on the part of the children. The parents hinder the work of the school by captious criticisms, failure to send their children to school regularly, and an unwillingness to help it by encouraging words and sympathetic support.

One is not astonished, but somewhat discouraged to learn that our scientific, literary and philanthropic institutions have so little interest in the condition of the schools or the means of improving them. The case does not improve when we are informed that a large majority of our operatives, farmers, mechanics, manufacturers, business and professional men and politicians have so slight an interest in our schools as to have practically failed to attract the attention of the superintendents of the several towns.

The changes demanded in the school law are in the direction of giving greater power to school officials, and placing such authority in the hands of the State as will insure expert supervision, competent teachers, regular attendance on the part of the children and an honest and economic expenditure of school funds.

The most encouraging feature of all these reports is found in the fact that the superintendents are overwhelmingly in favor of such a supervision of the examination of teachers by the State as will insure the employment of teachers who have suitable scholastic training.

The most discouraging item in all these records is the conclusive evidence which they furnish that more than $\$ 200,000$ are expended annually for the maintenance of schools that are practically worthless to the communities in which they are found and of slight service to the children who attend them. The recognition of this fact by the officials who have the best opportunities of judging of the merits of schools, and the desire to remedy these unfortunate conditions, give promise of hetter days for the public schools of Maine in the future.

It is hoped that every clergyman will seriously consider the question of emulating the example set by two churehes in a certain town, of having religious services in recognition of the opening of the schools each year. It is also hoped that a large number of the representatives of the Great Teacher will remember the noble work done for the public sehools by the old time ministers, and that they will renew their interest in these institutions. If these exercises could become the general custom of the State, it is impossible to estimate the help they would be to the schools.

These special returns force upon the examiner of the documents, the conviction that there are a considerable number of men and women in the State who are peculiarly qualified to do most excellent work as superintendents of schools, provided they could devote their entire time to this work, and were paid a reasonable sum for theirservices. These factsare so apparent on the face of the returns that one cannot help having great courage for work in this field, and a large faith in what the future is to bring to the schools of Maine.

## STATISTICAL CURIOSITIES.

The people of Maine should not expect any material improvement in the schools so long as only 3 per cent. of the superintendents attend Summer Schools, and only 11 per cent. attend any of the County Teachers' Associations which are held during any given year. Such a meagre attendance reveals a want of interest on the part of these officials which helps materially in fixing the responsibility for certain conditions found in so many of the schools.

It is somewhat instructive to note that the most of the ${ }^{\prime}$ superintendents who are opposed to State examination of teachers belong to one of the three following classes: They are teaching themselves; they have relatives who are teaching ; or they have a limited common school education.

It is not intended to convey the impression that all of the superintendents who are opposed to this change are grossly ignorant. Some of these officials who have a liberal education, or who have no apparent selfish interest in the appointment of teachers, expressed their opposition to the plan. But the number who are thus opposed is so limited that they are but a small per cent. of the whole number.

It is also true that most of the superintendents who have only a common school education are in favor of such examinations, and that substantially all who have been liberally educated favor such a law.

If it were not so serious a matter it would be amusing to note the objections urged by some of the superintendents to State examinations. Among the reasons assigned are the following :

Our schools are very backward, and do not require trained teachers.

The pupils in our schools are very young, and we can employ teachers of limited education.

Our people do not want to pay for the services of professional teachers.

If teachers were examined by the State, we would have to pay much higher salaries than at the present.

Teachers were not examined when I was a boy, and I am decidedly opposed to their examination at present.

The most of the superintendents who object to these examinations, report that they have schools which are properly described in the last report as "poor" or "very poor."

One superintendent recommends a law which would impose a fine of one thousand dollars or imprisonment for life upon any parent who enters a complaint against the school upon evidence furnished by his own child, if he has not made personal investigations of the matter.

One superintendent entered the complaint that people who pay large taxes, but have no children, were disposed to object to the amount of tax assessed for school purposes.

A large proportion of all the superintendents complained that parents interfere with the work of the schools by telling the children what to do and what not to do, even if such commands directly contravene the requirements made by the teacher, and that they go to the school building and in the presence of the pupils, upbraid her for what she does or does not do. It seems almost incredible that any considerable number of parents should be guilty of such offences ; and it seems equally incredible that superintendents will permit such flagrant and deliberate violations of the law without taking the necessary steps to have the offenders punished. The statutes are entirely clear upon this point, and it is the duty of school officials not only to support but to defend the teachers in the discharge of their duties.

One superintendent reports that "amusements are killing our children." A number of others refer to this subject in such a way as to indicate that the complaint is a general one. One of the preachers of the State, who is also serving as superintendent of schools says, "the chiidren need to be endowed with more capacity, and reduced about one-third in number." This announcement hardly bears out certain teachings which have been supposed to be based upon passages found in Genesis. He also makes record of a statement
given by a parent who said, "I got my education off the street ; I don't care if my boy gets his there."

One superintendent says, "I have an idea that the children need to be taught how to study." This is an idea which has been slowly creeping into the minds of educators for a number of centuries, and whenever it takes firm hold of the teachers of the country, then, we shall see better work done than has ever been accomplished.

One of the superintendents recommends that a child be whipped by his parents every time he finds fault with the school or the teacher.

There can be no possible excuse for the superintendents having to report that thirty-two per cent. of all the teachers of the State are employed without being examined as provided in the statutes. Possibly this misfeasance in office is. accounted for by the fact that so large a number of the teachers are relatives of the members of the superintending school committee, or associated with them in such a way as to secure their appointments without the regular examination.

It is almost past belief that towns are willing to carry this matter of employing relatives of some committeemen to the extent that some towns have. One town reported that there were seven teachers employed, and that six of them were related to some member of the school committee. In another town seven of the thirteen teachers employed are kindred of these officials, while in still another town having but five schools and five members of the committee, it is reported that all these schools are taught by persons who are serving as members of the committee. No comment which could be made upon this condition of affairs could be so scathing as a simple statement of the facts themselves.

One town enjoys the honorable distinction of having a teacher who has taught fifty years. Another breaks the record by clecting a superintendent who is eighty years of age. So far as can be learned, both these persons are in sympathy with the spirit of the age, and are keenly alive to the changed
condition of society, which calls for great changes in the management of school interests.

One superintendent reports the strong points of his teachers as, "campaigning for schools, and a love of money." A man of peace, who practices what he preaches, writes that the most encouraging thing in his schools has been, "fights." Another clergyman says that the greatest service which the parents can render the school is, "to keep still until they know that they don't know."

A superintendent also reports that the politicians of his town are so good that they do not meddle with the schools, and another insists upon a law forlidding the marriage of good teachers.

It is some what surprising to learn that there is at least one person in the State of Maine who objects to having a dietionary in the public schools, because bad words are found in it.

From the appearance of a good many school-yards, it is easy to understand how some parents think it foolishness to have lawns in front of school-houses, and that it is equally foolish for teachers and pupils to cultivate flowers in the school-yards; and that the decoration of school-rooms with flowers, plants and laves is a waste of time and effort. We should expect such people to say that general exercises and lessons on morals, manners, plants, animals and minerals, were unnecessary because such things were not taught whon they were children. But it is not easy to conceive of the arguments which a parent would urge against teachers giving lessons on distinguished mea and women, noted events. local and national history, items of current news, and such general work as would give the children some intelligent idea of what has been done, or is being done in the world.

It is evident that criticisms of the character indicated above have been so generally made as to attract tho attention of a large number of superintendents. As long as parents are willing to oppose having such work in the schools so long we mu it expect the teachers to fail to be of any material service to the children.

## WASTE.

Any one who is familiar with the old time home life in Maine is aware that much of the sturdiness and spirit of enterprise which characterized the youth of former generations was due to the habits of thrift which they were obliged to practice. These habits of prodence in the management of the affairs of the home and the expenditure of money, tended to sharpen, stimulate and invigorate these boys and girls. These experiences were of infinite value to the people of Maine, physically, mentally and morally; these efforts made them thoughtful, helpful, vigorous and progressive. No community can afford to lose the advantages which come from such living, and whenever a community becomes careless in its expenditure of money, thoughtless in its care of property and reckless in its use of opportunties, from that date its degeneration is certain.

If one does not give a fair equivalent for what he receives, he is guilty of an offence which will show itself in his character. Too strong emphasis cannot be placed upon the fact that our people must continue to buy with a wise economy, use with a careful prudence, and hold in high esteem those who are careful in the handling of public funds, and are unwilling to receive the same without rendering a full equivalent.

It is as true of schools as of any other department of activity, that the least profitable labor is performed by untrained workmen ; and that the next most expensive service is rendered by persons who are not paid for what they do. These two facts go a long way toward explaining why so many thoughtful persons are disappointed that no larger return is made for the vast sums which are expended in maintaining the public schools of Maine. But few people are aware that there was expended to maintain the public schools of the State, during the school year of 1894-5 the sum of
$\$ 1,766,323.07,{ }^{*}$ which gives an average of $\$ 555$ for each school, provided that schools are so arranged that there shall be an average of thirty pupils in each school. This is an amount large enough, if properly expended, to furnish every child in the State with an opportunity to be instructed by a competent teacher for thirty weeks during each year, and also to furnish a high school in every town of the State, of more than twelve hundred inhabitants, and to pay for one, and in many instances, two terms of high school in the smaller towns. After paying all the expenses connected with maintaining these schools there would be a balance remaining large enough to provide competent suparintendents for all the schools of the State, if arrangements were made, to place thirty or forty schools in the charge of each superintendent. These statements are made after a careful estimate of what it would cost to secure trained teachers, what it would cost to maintain free high schools of a standard grade, and what would be the cost of furnishing skilled superintendence.

It may be of some interest to make a careful study of the money expended and the schools maintained in one of the smaller towns of the State. The town selected is one whose financial condition does not warrant it in being lavish in its expenditures in any direction. It has a population of a little less than one thousand inhabitants. It expends for school purposes, on an average, $\$ 1,880$ a year. This sum includes the amount paid for teachers, fuel, books, supplies, repairs, supervision and transportation of pupils. The inhabitants are so distributed in the town that it would be convenient to have all the children accommodated in three schools. It is supporting, at the present time, more than three times this number. If the children were brought together into three schools, there would be in each an average attendance of about thirty pupils. If the schools were maintained for thirty weeks, and the teachers were paid $\$ 12.50$ a week, the salaries of the teachers would amount to $\$ 1,125$. A liberal

[^0]allowance is made for the following items, when $\$ 45$ are allowed for fuel, $\$ 60$ for books, $\$ 40$ for supplies, $\$ 75$ for repairs, $\$ 120$ for superintendence, $\$ 200$ for transportation and $\$ 40$ for the libraries and apparatus of the schools, making a total expenditure for one year of $\$ 1,705$, leaving a balance unexpended of $\$ 175$. If this sum was used to maintain a free high school, and the town received from the State, as it would be entitled to, an equal amount, it could spend for this purpose $\$ 350$ a year, which would give the town a high school for two terms of ten weeks each, and pay the instructor of the same a salary of $\$ 70$ a month.

This town has not maintained a free high school for some years, because it citizens felt that they could not afford to support one. The town has no villages, no wealthy citizens, no industries except farming, and a few country stores, and in no sense could be considered especiatly prosperous. It is hardly an average rural town of a rural section of the State. The people, as has already been stated, are engaged in farming, are able to provide themselves with fairly comfortable homes, and have an interest in giving their children a common school education. The amount raised for schools is the amount required by law. The amount expended for books, supplies, repairs and superintendence, is the smallest sum the demands in these directions will warrant.

This example of what is done and what might be done has been given to show that we do not need to raise more money to maintain public schools, of a standard grade, but we need a more intelligent expenditure of the funds used for this purpose.

It will be noted that in the items of expense, there is an allowance of $\$ 120$ for superintendence, and that there are only three schools in the town to be superintended. The allowance made above gives a superintendent $\$ 40$ for superintending each school. If he is employed by a group of towns, and has thirty schools under his care, and each town pays him in the above ratio, he will receive $\$ 1,200$ a year for
his services. This is a salary large enough to insure the employment of a person of good scholastic attainments, and some experience as a teacher. When we reach a point in our school administration where we put into the work the same thought, the same intelligence, and the same economy that the average business man puts into his business, then we shall have schools, taught by competent teachers, and superintended by competent officials. When this day comes, the communities, towns and State, will receive a far greater return for the large sums that are spent for schools, than is possible under the present want of system that prevails in the administration of school affairs.

It will easily be seen from the above that the plea is not for more money, but for a wiser expenditure of the money which is devoted to maintaining schools. It is believed that the time has already come when the citizens of our State, who believe in the public schools, should take this matter in hand and see that such changes are inaugurated as will insure an intelligent management of the schools along financial and professional lines.

Such information has been gained through personal inspection, reports of superintendents and testimony from private sources, that the department is warranted in definitely stating what improvements should be made in the condition of the school yards, outhouses and school buildings of the State. It is to be understood when statements are made which indicate a deplorable condition of affairs in these several particulars that they apply only to a certain per cent. of the schools; Kut it will be seen from these returns that this per cent. is so large that it is impossible for the schools to do the work which is expected of them, while they remain in their present condition.

There is but one explanation for the difference which exists between what is and what might be. That explanation is found in the single word "Waste." The squandering of school funds has reached proportions which are appalling to persons who have made a study of these questions.

In a number of communities of Maine, but little effort is made to secure a lot which is large enough ; or has the right kind of soil ; or is provided with suitable drainage; or is favorably located. Here is a waste that cannot be estimated in figures or stated in words. They are sources of degradation to the children who use them, and teachers are hampered and discouraged by being placed in such unfavorable surroundings.

The fences which surround these lots are built in a primitive, unsubstantial and unserviceable manner, and either have to be renewed frequently, or become unsightly oljects in the communities.
The outhouses are simply rough board shells, with ill-fitting doors, sometimes held in place by one hinge, and sometimes even wanting in this means of attachment to the building, being put in place by each user of the hovel. As a rule, these buildings are not provided with vaults, and the spaces beneath the sittings are not cleaned, and no precautions are taken to protect the morals, the manners or the health of the persons who are compelled, by necessity, to use them.

It is evident that in the construction of the school buildings which disfigure these plots of ground, no intelligent effort has been made to have them built according to architectural principles or in compliance with the laws of hygiene. An open space is surrounded by a frame, and it is supported on posts or poorly constructed piers. This frame is boarded and in most cases it is clapboarded or shingled. The interior is finiwhed in the cheapest lumber that the market affords, or is lathed with a quality of lumber that stains through the plastering, and these areas are covered with plaster that soon drops from the walls and ceiling.

No effort is put forth to make use of the knowledge and experience of others. More money is expended in the construction of the building than need be if the work were placed in competent hands. When the building is finished it is a discredit to the builders, a source of torture and discomfort
to pupils and teachers, and an eye sore to the community in which it is located.

The yard is ungraded. The outhouses are improperly located and poorly built, and the schoolhouse is dropped down at the point that happens to strike the fancy of a person who has not given its location a moment's thought. A little study, and consultation with experts would have secured a lot of large area at small cost, in a suitable location, put its surface in presentable condition, and built outhouses and a schoolhouse which would have been largely influential in the best training of those who use it during their school and teaching days.

There can be no question but that from a purely financial standpoint it pays and pays handsomely to employ the highest intelligence and the soundest judgment to take charge of the construction and care of school buildings. When these conditions obtain we shall be saving money along the very lines in which we have attempted to save by being unintelligently economical.

Inquiry and observation have made it quite clear that it is not an unusual practice to pay the highest market price for everything which is purchased for the school in the way of supplies, books, fucl and repairs. One instance is reported where a person charged two dollars for a trip to town to get a pane of glass. His charge for the glass and setting the same was twenty-five cents. The case cited is unusual in the extent of its flagrancy, but not exceptional as indicating the ways in which money is wisted by certain officials. A study of the fuel question reveals the fact that school officials in a number of towns have paid more for wood, delivered at the schoolhouse, than the same commodity would bring in the nearest market town. It is noted that in not a few of the towns there is a lamentable laxness in the measurement of wood furnished for the schools, and an acceptance of a quality that would not pass inspection even in the least critical markets.

In making repairs, more time and money are expended in making the examination, getting the material and finding some one to do the work than for the material and labor.

Such loose methods of conducting busincss affairs, such total absence of economy in the expenditure of a million and three quarters of money can but result in an enormous waste of the funds appropriated by a generous people for the maintenance of schools and the care of school property.

It would be wise economy for cach town to select some competent person to examine carefully its public buildings at stated times, report in writing to some board its findings, and then make needed additions and repairs under its direction and inspection. When this work is placed in the hands of a skillful and honest person, then we shall have graded school yards, suitable outhouses, and schoolhouses which will be an ornament to the commanities of the State, and a means of blessing to those who use them. Until this plan is adopted no substantial improvement will be made along these lines.

There is, however, one particular in which school officials are economical to the point of the most reckless extravagance. The practice of employing the teacher who will work for the smallest sum has been carried to such a point as to render a considerable portion of the amount paid for these services practically valueless. Personal observation reveals the fact that a certain number of schools of the State are in charge of persons so untit for the positions which they hold as to be not only of no service to those placed under their charge, but to work a positive injury to the children, because they assist in the formation of vicious habits, the growth of mischievous ideas, and the dwarfing of the student spirit in the children. It is vastly better for the children to be at home, engaged in serious and profitable labor, than to be in a school conducted by a teacher who has not the scholarship, aptitudes, training and personality which fit her not only to direct and assist the children in their studies, but also to inspire them with a desire
to learn for the sake of the power which learning gives. Great as is the waste in connection with the property interests of the schools, it is as nothing compared with the greater waste which results from the employment of unfit and misfit teachers.

The patrons of the public schools of to-day have but little of the interest, care and sympathy for the public school that the parents in the olden time had for this institution. They do not visit the schools; they, therefore, cannot study them. They do not know the teacher; they are not familiar with the work done, the methods used, or the results achieved. They are content with voting money for school purposes, and leaving the school officers to select lots, erect buildings, provide furnishings and employ teachers. Good schools can never be maintained in any community in which the parents are indifferent to what is done for the schools and how they do their work. They must have an intelligent concern and a continuing interest in the property plant of the school, the employment of teachers, the studies pursued, the methods used, the work done. If this sympathy, thought and interest exist, they will show themselves by the presence of the parents in the schoolroom. They will know the teacher personally and professionally. They will know her antecedents, her attainments and general fitness for the work. They will restrain the quick tongue, and withhold the harsh word. They will not interfere with the management, discipline, and work of the school, or rashly criticise the teacher or her work. Instead, they will be sympathetic, responsive and helpful. Parents realize to a very limited extend what fearful havoc they are making in the schools and to what terible waste they are subjecting these agencies by interfering with the work of the teacher, by refusing to send their children to school regularly, and by failing to instill into the minds of the children a respect for the school, a respect for the teacher, a respect for school officials, a respect for lawful authority. A larger per cent. of the money appropriated for school pur-
poses in Maine is worse than wasted because of these causes than is realized by those who are most directly connected with the work of the schools.

Tacit consent, general comment and almost universal practice have made the pupils in many of the schools to-day feel that they are not in school to yield obedience to lawful authority, to have a just respect and wholesome regard for the teacher, to comply with the rules and regulations made by school officials, and to master, by their own efforts, the work assigned them. But, instead, many children feel that they are sent to school to be amused; that it is a part of their legitimate business to criticise the teacher, report what she does or they think she does, and what she says or they think she says, to comment upon the same, and to have the work which is given them to do put in so easy, simple, attractive and understandable a form that they can accomplish it by simply nodding acceptance to its tender. They waste their energy, they pervert their lives, they contract bad halits, they come to be influenced by unworthy and unwholesome motives, and they grow into being selfish, and become enfeebled in mind and body. When one stops to think that there are enrolled in the schools of Maine at the present time, 135,598 children as pupils, then does one begin to understand the terrible waste that is beng made by these same young people in their failure to appreciate the purpose for which they are in school, what their attitude toward the school should be, what work they should do while in school, and what purpose the school is to serve in their life and development.

The statistics found in another section of this report make it altogether too plain that a considerable number of the persons who compose the school committees of the State of Maine have friends, relatives, associates or connections by blood, business or otherwise, whom they wish to see in the schools as teachers. It is altogether too clear that the average rural school is used as a means of rewarding friends, helping relatives and paying political and other debts. It is
charged, and the charge seems to be supported by not a little evidence, that some men are ambitious to be elected members of school boards for the purpose of controlling the election of the teachers in their schools. One cannot too strongly condemn such practices. The State and the town have a right to demand that the money appropriated for school purposes shall be disbursed in such a way as to yield the largest possible returns. Such returns cannot be forthcoming unless teachers, competent in every way, are placed in charge of the schools. This competency cannot be assured unless such means are used to ascertain their fitness as to place the matter beyond all controversy.

It is feared that some of the members of school committees feel that they have discharged all the duties devolving upon them when they have made the necessary arrangements for the election of certain persons as teachers. The matters of purchasing material, caring for school property is not considered of sufficient importance to occupy their attention for any considerable length of time. While it is important that the control of the schools be, so far as possible, in the hands of the local authorities, it is also still more important that such safeguards be placed around the schools as will make it impossible for incompetent teachers to be placed in the school room, and to provide such supervision as will make it impossible for superintending school committees to neglect with safety the proper kecping of accounts, the suitable care of school property and the economical expenditure of schoolfunds.

The average amount expended for text-books in this State for five years is $\$ 91,366$, making an average expenditure for each child for each year of ninety-four cents. There is, at least, one city in the State which has been able to supply the pupils in its schools with the necessary text-books for five years at an average of less than thirty-two cents per pupil per year. The margin between thirty-two cents and ninetyfour cents is too large. Any one who is acquainted with the number of books furnished the pupils in the common schools
is aware of the fact that the schools are not supplied with as many books as are nceded. If all the above statements are true, then it necessarily follows that the money used for this purpose is not expended with the care which the ordinary business man uses in the purchase of the material needed in his business. If the amount expended in the city referred to above were doubled, there would still be left thirty cents of an excess when we compare the average amount expended with the amount thus allowed.

In most of the rural schools superintendents or superintending school committees continue the practice of buying expensive fourth, fifth and sixth readers, a large number of complete geographies, and an equally large number of complete arithmetics. A great saving might be made in these particulars if these officials would make a careful examination of the books furnished by many of our best publishing houses for supplementary work in all the branches mentioned above. These supplementary books are vastly superior to the regular text-books in the matter given, and in most cases are furnished at about one-third of the cost of the regular texts.

But even admitting that is is best to buy the regular textbooks, and that it is necessary to buy them in the numbers purchased, there still remains one particular in which a waste is permitted that makes the expense account in the matter of text-books, at least, one-third larger than it should be. Books are torn, mutilated and abused, by the pupils. No effort is made to compel the persons guilty of these destructive practices to replace the injured book. In but few schools are bookcases provided and proper efforts made to have the books labeled and suitably cared for when not in use during term time, and during the vacations. If school officials would put a little time into instructing their teachers how the books are to be cared for, in seeing that they are properly labelled, that when a book is injured it is paid for, and if they would provide a suitable case for the books and insist
they shall be placed in the same, a saving could be made which would aggregate a large sum for the whole State.

If school officials were willing to make a careful study of the needs of their schools, a still more careful study of the material which may be purchased to meet these needs, the amount expended for text-books could be materially reduced. To do these things, one must be something of an expert in these matters, and be paid for the service he renders. If this matter were handled in the way in which it should be there would be enough saved in this one item to go a long way toward paying for skillful superintendence. It is earnestly urged that the towns take into serious consideration the question of trained superintendence ; that when such superintendents are employed they be made responsible for exercising the most scrupulous economy in the purchase of all material used in the schools, all repairs made upon school property, in a word, all expenditures made by the town for school purposes. If a few towns would make an experiment in this direction, the results would be of such conspicuous financial advantage that all towns would soon follow the example set them.

It is not intended that anything which is said in this connection shall imply, directly or indirectly, that superintendents or members of the superintending school committees, are guilty of dishonesty in handling school funds. It must be peculiarly encouraging to every citizen of the State to know that the most careful examination of this whole question, has revealed only a small number of superintendents who are disposed to use school money in any way, or for any purpose not provided for in the statutes.

As some one may get the idea from the foregoing remarks that it is only in the school department of each town that there is an unintelligent expenditure of funds, it seems wise to make the following statements. In a certain town of the State there has been spent during the past ten years considerably over two hundred thousand dollars for the purpose of
maintaining the roads of that municipality. The following sentence from a well-known citizen of that town will indicate, with sufficient definiteness, the success which has attended these labors. He said: "There is not a piece of road in this town of any considerable length where a person can drive a horse at the rate of twelve miles an hour without endangering his own life, ruining the animal driven and wrecking the carriage used." This simple statement shows that there are other departments beside the school department that stand in need of better training and greater skill to secure an economical expenditure of money.

## DOES IT PAY TO EDUCATE CHILDREN?

No one can visit the shire-towns of our counties, and make careful observations of the county buildings and grounds without being impressed with the fact that a large amount of money and unusual intelligence have been used in the construction and care of these plants. The grounds are beautifully laid out, handsomely graded, and have lawns which would make the heart of an English nobleman swell with pride. They are ornamented with trees, and in their areas are found attractive beds of cultivated flowers. The buildings themselves are constructed of the best material which the market affords, and are erected according to plans prepared by experts, and are not only serviceable for the purposes for which they are used, but are architectural ornaments in the communities in which they are located. No person who is connected with the public schools will for a moment criticise the action of county commissioners in making these ample and attractive provisions for the transaction of the business of the county, and for the custody and care of the criminals who come under its charge. Everything that has been done in this direction has been done because the people who have made the most careful study of all these questions have found that it pays in every sense in which the best things pay, to have the buildings set apart for public uses not only constructed of the best material and according to plans approved by experts and located on favorable sites, but that they should also be supplied with the best conveniences and apparatus that the ingenuity of the age has devised. Every lover of the public schools must rejoice that we have in the State so many county buildings that are substantial and beautiful structures; that our criminal classes are placed in institutions surrounded by conditions which will assist them to better ideas of living, and it is hoped to better ideas of life.

One who has travelled through the State cannot but be impressed with the fact that a considerable number of the most intelligent breeders of stock have expended large sums in providing suitable buildings and surroundings for the stock which they are raising. These men are among our most conservative and progressive citizens. They appreciate the value of blood; they understand the value of suitable housings for their stock; they believe in providing the service which experts can give, and are willing to pay out their money lavishly for these things. It is a matter of common knowledge that an expert has been paid $\$ 2,000$ a year for training colts, with the hope that he would be able to send them down the track at a speed that would shrink the famous Righy record. These men have made a careful study of the breeding and care of animals and of the methods used by others in the training of race horses. They are in these enterprises from financial considerations. They believe that the highest skill, the most expert service is the most profitable service for them.

When one contrasts the buildings furnished for the pet stock of the State, and the trainers who train them, with many of our school premises and some of our school teachers, the comparison is not peculiarly gratifying to one who believes that boys and girls are quite as valuable as blooded stock. Is it true that the State of Maine, that the people of Maine, that the descendants of the Pilgrims and the Puritans are willing to pay $\$ 2,000$ a year for the training of a favorite horse, and are satisfied to pay from $\$ 3$ to $\$ 10$ a week for a woman to educate their boys and girls?

It would be a misfortune to have the business men of the State do less in the direction of developing blooded stock, of improving the natural resources of the State, of making the most of our industrial advantages; but it is hoped that in the effort which is being made to give the State a fair record along industrial lines, the schools and the children will not be so entirely relegated to the background, that they will cease
to receive the consideration of our business and professional men, - the men who have in their hands the moulding of the State.

It is for the financial interest of every owner of property, of every toiler with his hands, of every lover of his kind, to furnish the children with such physical surroundings, such moral atmosphere, such mental training, such æsthetic opportunities as will permit them to take as worthy a place in the work of the world as the citizens of Maine have been tamous for filling in the years that are past.

Any one who has made a careful study of this whole question cannot but be impressed with the serious fact that every one who has any financial interests at all, has a financial interest in the education of every boy and girl in the State. One does not need to study statistics very much to be aware of the fact that the value of the person depends largely upon the quality of his education. When one realizes the small sum which is received for manual service in Asia and in Russia as compared with the sum paid for a similar service in this country, and particularly in Massachusetts, does one appreciate the fact that it pays in dollars and cents to educate all the citizens of the State. Where ignorance abounds, there the poople are not only unfit to render a service of value, but are content to use but little of what the most intelligent and skillful members of the community are producing.

The centers of population draw the most of their increase in inhabitants from the rural sections of the country. The value of this increment is measured by the educational qualifications of the incomer. If he is ignorant, he is willing to live in a primitive, rude way. If he has been trained intellectually, he is not content with the bare necessities of lite. This broader training breeds in him the desire for a home of which he is the owner. He is ambitious to have it furnished with the conveniences, and to some extent, with the luxuries of our modern civilization. He asks that his food,
clothing, and opportunities for improvement shall be such as will enable him to get some of the best things which the world is prepared to give. The cities have a double interest in the intellectual training of all the people. If the people are educated, those who come into these communities are more valuable citizens, use more of the articles there manufactured and sold, and render a service which is of the greatest value to these centers. If they are educated and remain upon the farms, the same conditions are true, and the same materials have to be supplied. If, on the other hand, they are ignorant, they need but little in whatever place they may cast their lot. Needing but little, they consume but little of what the manufacturer produces and the merchant sells.

There is but one side to this question of the interest of the individual in the education of the whole people. If the towns are to prosper, they must depend for their prosperity upon the intelligence of their inhabitants, and those who are dependent upon these towns because of their geographical relations to them. If one cared to use a figure of speech, he would not be straining a metaphor were he to say that it is ignorance that gives us the blackness of darkness of Africa, the night of Asia, the twilight of Russia ; that it is education that gives us the sumrise glory of the United States, and the approaching meridian light of the most favored localities in New England.

No one can study this question with a desire to learn what the facts are without realizing that it is one of those cases where if one is desirous of a large return, he must be willing to make a liberal investment; and that if the whole State is willing to provide for the education of the whole people, the whole State will reap the reward of such effort ; and that there is no section of the State which has so large a financial interest, so vital a financial connection and will reap so large a financial return for the investment made as the cities of the State. Whatever adds to the general intelligence adds to the general prosperity. Whatever adds to the
general prosperity accrues directly not only to the benefit of the man who toils with his hands, who brings forth the treasures of the earth, but in equal measure to the man who manufactures the product and the man who distributes it to all users of the same.

This is a question in which every citizen, rich or poor, learned or ignorant, exalted or humble has an equal interest, because whatever develops intellectual power increases knowledge, adds wisdom, gives larger views of life, better conceptions of citizenship, broader visions of duty, and in the end means financial prosperity and material growth to the communities which have intelligence enough to assume the responsilility of placing each citizen in such a position that he can make the most of the best in him.

## EXPERT SUPERINTENDENCE.

A casual study of the special returns made by the local superintendents and tabulated in the first section of this report, makes it entirely clear that the time has come when it is necessary to provide for expert superintendence of the public schools of Maine.

The returns show that 96 per cent. of these superintendents are engaged in some other occupation, and only give to this work such time as they can spare from their regular business. The work done by such persons must necessarily be, to a great extent, haphazard in character, unsatisfactory in results and wanting in those elements which insure good service. To superintend schools intelligently, one needs scholarship, professional training and experience in the work of the schoolroom. He needs to know the suljects studied, the methods used in giving instruction and to be familiar with the history, science and art of education. He must not only be familiar with the facts taught in text-books, but he must also be a student of science, art, literature, history, economy. He must know what the world has done, what it is doing, what it is capable of doing. He must know men, things, means. He must be strong of mind, rugged of body, rich in personality. His work must be his absorbing vocation. To it he must give his entire time and devote his best thought. He must study schools; he must study teachers; he must study children. One cannot do and be all these things unless he has an aptitude for the work, has prepared for it, and gives his whole time to it. If one's best thought is devoted to his patients, his parishioners, his business, or his farming, it is not possible for him to serve the schools in such a way as to help the teachers to give the best instruction, and the children to do the best work.

The amount expended annually for the superintendence of schools in the State of Maine is about $\$ 60,000$. This is a sum
large enough to give to each town about $\$ 120$ for this purpose. If this amount were supplemented by an equal amount from the State, and a number of towns joined in employing a superintendent of schools, then such a sum would be available for this purpose as would enable the towns to secure a competent person to perform these duties.

Perhaps the plan of procedure can be made clearer by using the following illustration. Suppose the towns of Turner, Livermore, Leeds and Greene unite and employ a superintendent. Suppose Turncr contributes $\$ 225$, Livermore $\$ 145$, Leeds $\$ 90$ and Greene $\$ 90$, making a total of $\$ 550$. If an equal sum were furnished by the State, the amount would be $\$ 1,100$. On this basis Turner would be entitled to five votes, Livermore to three, Leeds to two, and Greene to two in the selection of a superintendent. If the schools were consolidated even to a reasonable extent in these towns, the whole number would not exceed twenty-five, and in no case would they exceed thirty. The amounts apportioned to each of the towns named above is not materially in excess of the sums now appropriated for this purpose. This union of towns and placing all the schools in the charge of one person who would be expected to devote his entire time to the work, would insure the employment of an official who would have a personal interest and professional pride in making the schools the best which the means placed at his disposal would allow.

The returns made by the superintendents show that the majority of them are somewhat advanced in years, a fact which in itself does not necessarily indicate an unfortunate condition of affairs. It is, however, true that the changes which have taken place in the branches taught and methods used in giving instruction, during the last quarter of a century have been so great as to render it important that the persons who are responsible for the administration of the schools shall be familiar with modern ideas, methods and appliances. It is encouraging to note in this connection, that some of the older superintendents seem to be peculiarly interested in
their work, familiar with the needs of their schools, and anxious to improve them. Many of those who have passed the meridian of life are cordial in their indorsement of the "new education," and are prompt in introducing new studies, modern methods and better helps.

While a considerable number of the superintendents have received a liberal education, still it is true that the proportion is much smaller than it should be; and it is also true that a very large per cent. of the superintendents have not received such scholastic training as to prepare them properly for their duties.

It is evident from the returns that many of them have not supplemented their limited education, by subsequent study or reading along general or professional lines.

These returns also show that a very large per cent. of the superintendents have not read books, papers or magazines treating of educational subjects. If their testimony is reliable, and we have every reason to believe it is correct, it is manifestly impossible for them to be of material assistance in directing, inspiring or helping the teachers or pupils in their work. A careful examination of all the facts in the case must convince any person that this change is a wise and important one, and that every person interested in the public schools is concerned in the enactment of a law providing for a system of expert superintendence.

## SOME CHANGES THAT MUST MODIFY MEANS USED.

When we compare the condition of the common school of to-day with the school of fifty years ago, we must not forget that certain changes have taken place which materially modify the means which can be used to improve the schools of the present. In the olden time the teacher taught not only the children who attended his school, but also the community as well. He was an oracle as well as a teacher. He was familiar with current events, history, philosophy and science, to some extent. He was a student in the old sense of the word, and a scholar in the best sense of the term. He was thoughtful, studious and devoted to his work. He was judicious in conduct, deliberate of speech, controlling in influence. Many of these things are not true of some of the teachers of to-day, and in studying this question it is well to bear these facts in mind, and in instituting reforms, one must not fail to consider carefully the means which can be used, while he is deciding upon the work which must be done.

In the old time school the pupils were of all ages from four years to more than twenty-one. They studied all subjects from the spelling book to, and including, higher mathematics. To quite an extent, each pupil was permitted to go his own way, study the subjects he chose, and pursue them as far and as fast as his inclinations and abilities would permit. There was but little of what is known in the present day as recitations, with the exception of certain work in reading, spelling, and the historic parsing class. In mathematics, the student was told to take as much as he could master, and call for assistance when he needed it, and to report once a day. The large attendance, the almost limitless number of classes made it impossible for the teacher to do very much in the way of individual instruction. He kept the school in order, compelled the pupils to attend to their studies, and limited his efforts to giving directions, making suggestions, furnishing
some assistance in the way of explanations, and strove to stimulate his boys and girls to make the best use of the short time allowed them for attendance upon the district school.

Within fifty years, changes which are hardly less than a revolution, have taken place in the rural schools of Maine. The old time schoolhouse has fallen into decay and has been abandoned. The old time schoolmaster and schoolmistress have gone to that bourne from which no pedagogical traveler has ever returned. The boys and girls who crowded the schoolrooms have not only disappeared, but their places are not filled by their descendants or successore. The old time school yard with its brambles, bushes, weeds, and decaying grass is still found in some localities. The tumbled down shanty of an outhouse is still in evidence in some school yards. The barren, battered and stained walls are still used in some communities to inclose, if not to protect the youth of the land who are seeking for knowledge. But at the teacher's desk there are found not a few who have recaived all their education in the same kind of school which they are "keeping," and who cannot, because of a want of experience, lack of education, absence of training, and the quality that comes from mature years, do the service for the children that was rendered by the old time teachers, because of the strength, power, and influence of their personality.

In the pupils' seats are found but few children over thirteen years of age, and many of them not specially eager to study, not particularly interested in learning, not generally willing to work out their own intellectual salvation with fear and trembling, by their own industry.

It is to be regretted beyond all possible expression that we have lost the strong features of the old time school; the maturity, the dignity, the manhood and womanhood of the teachers, the presence of older students who furnished examples and inspiration for the younger, the eagerness, the alertness, the willingness to strive and struggle, the anxiety of the boys and girls to do something, to be something, to accomplish
something. Those who are leaving our public schools to-day are wanting in energy, endurance, ability to stand alone and do by themselves worthy work. They have been freed from cares, relieved of responsibilities, have had their work done for them, their intellectual pabulum masticated for them so long that they have been rendered incapable of even assimilating elaborately prepared intellectual food. It is noted and commented upon by school officials, business and professional men that the young people who come to them in these days are wanting in those strong, rugged, masterful qualities which have made, in the past, such a splendid record for the men and women who went out from the homes and the old red schoolhouses of the Pine Tree State.

In the olden time, one of the deities devoutly worshiped in our best homes was the god of "Get On." It was the admonition of the father, the inspiring influence of the mother that made the boys and girls of the past anxious to know, to do, to be, to win not only position, station and wealth, but success in a large and worthy sense. All the members of the family, from the grandfather with his bowed foim, to the wee toddler just shedding his skirts, seemed to be imbued with the feeling that each must stimulate the other, that all must work together, and that if a path were to be made for each it must be hewn out through an untrodden area by the efforts of the one who was to walk in it, aided by the sympathy of those who were making ways for themselves. But in these days we hear, so often as to be sickened by the reiteration, the sentence, "I do not want my boys and my girls to work as I had to work, to pass through the experiences I had to pass through, to be required to struggle as I have struggled, drudge as I have drudged, and submit to the privations I have endured. I want their lives to be cheerful, easy, prosperous and filled with sunshine." One cannot have too much sympathy, too much respect, for one who desires to minimize the hardships of another's life. But there is one stern lesson which parents as well as children must learn, and it is, that experience cannot be acquired by proxy. One
must do his own work, develop his own strength, and live his own experiences. It has taken six thousand years for the world to reach its present vantage ground. The best thing that it has gained from the long years of its pilgrimage, is the strength that has come from the struggle, the endeavor, the experiences the race has passed through on its journey from the beginning to the present. Parents and children must come to a realizing sense of the stern and important fact that children must have cares, responsibilities, duties; that they must have work to do and that they must do it; that they must do it faithfully and intelligently; that the tasks which are given them to perform shall be accomplished, without such assistance and such supervision as will take away from the doer all sense of personal responsibility in the doing. When the task is assigned and directions are given, then the doer must be left to work out the result, in his own way. Failure in the product does not necessarily carry with it a failure in the effort. The best thing that one often gets from doing, is not in the thing which he has done or produced, but in the experience, the strength, the wisdom, the vision which he has gained from the work itself.

## STATE BOARD OF EXAMINERS.

There was apportioned to the cities, towns and plantations by the State for the year $1896,516,81897-100$ dollars for the purpose of giving instruction in the public schools maintained by these municipalities. This is a large sum, when we take into consideration the population and valuation of Maine. The State should not shirk the responsibility of seeing that this money is expended in such a way as to do the greatest good. At the present time the State receives the money for the School Fund, apportions it to the different municipalities and with these perfunctory acts its duties and responsibilities seem to cease. This condition of affairs cannot continue without permitting a great wrong to the children.

The time has come when it is clearly the duty of the State, and one from which it should not shrink, to satisfy itself that this money is expended with a wise economy. It should know to whom it is paid, for what it is expended and should have some definite information as to the quality, character and training of those who have charge of the instruction of the youth who, a generation hence, are to be placed in control of all its interests. All thoughtful citizens realize that this money cannot be wisely spent unless it is used to pay for the services of competent, trained instructors. The State can, with a small expenditure of money, ascertain if her teachers possess these two essential requisites. The time has come when a Board of Examiners should be appointed, whose duty it shall be to provide for the examination of all persons who desire to teach. In some of the counties it would be necessary to hold but one examination each quarter; in others it would be better to hold examinations in two, three or four different towns. These examinations should be held at such times as will give persons who desire to teach an opportunity to demonstrate their fitness to engage in the work. They should not be, at first, of such a nature as to
eliminate from the profession a large number of those who are now teaching, but they should be of such a character as to prevent those who are grossly unfit for the work from remaining in the service, and should be of such increasing thoroughness that those who are but partially prepared for their duties will see the wisdom of more thorough preparation, or the necessity of leaving the profession.

The expenses of this Board could be paid many times from the saving which would come to the State in having an eligible list from which school officials shall select their teachers. The lowest estimate that can be fairly made of the incompetence of the teachers is that one-fifth of them are not qualified to fill the places which they occupy. This means that there are over one thousand teachers in the State whose education is so deficient as to render them failures as instructors. Assuming that these schools are in session only twenty weeks and admitting that they cost the towns only $\$ 150$ each, for the full year, the aggregate sum paid for "keeping" these schools is $\$ 150,000$.* One needs to consider this question but a moment to realize that it is impossible for the State any longer to neglect, with safety, its duty in this matter. The issue is upon us; we must meet it. We must decide whether we will or will not be true to the trust committed to us.

It is not intended to imply that such examinations would eliminate all incompetent teachers from our schools. It is believed they would make it impossible for a large proportion of those persons who are lacking in scholarship to receive authority to teach.

In the first place the most of the teachers who are not qualified to take charge of a school realize their unfitness and would not volunteer to be candidates for certificates. Some would be dropped because they could not secure certificates. The best would be retained and these would be made better by the study they would be induced to make to prepare themselves for their work.

[^1]This law would place in the hands of the State the power to say from what list of persons the teachers shall be selected. If towns desire to make more thorough examination of candidates for positions in their schools, the law should leave them free to do so. It should leave the matter of employing teachers and the management, discipline and everything connected with the general administration of the school in the control of the local authorities.

It must be apparent to all that the possession of a certificate from a State Board of Examiners would help to give the people of a community confidence in the scholarship and ability of the teacher placed over their children. This confidence has much to do with making a school successful. Without it but few teachers can succeed; with it a much larger number would do credit to themselves and render acceptable service to others.

## SCHOOL YARDS AND SCHOOL BUILDINGS, DESIGNS, PLANS AND RECOMMENDATIONS.

In the last report of this department a somewhat detailed statement was made of the condition of the school yards, outhouses and school-buildings in the rural section of the State. Many inquiries have been received which indicate that a general interest has been aroused in these matters. To assist in improving the schools in these particulars the following plans, sketches and explanations have been prepared. In doing this work the fact has been constantly kept in mind that the suggestions furnished should be specially serviceable to towns having but small sums to invest at any one time, since the financial condition of most of the rural towns of the State make it imperative that they practice the most rigid economy in the expenditure of town funds.

In presenting these suggestions and explanations as to the selection of lots, construction of outhouses and school-buildings, no attempt will be made to present arguments in favor of any of the positions taken, or to quote any authorities upon these subjects. These matters have been so elaborately and ably treated by Dr. A. G. Young, Secretary of the State Board of Health, in his report for 1891, that it is unnecessary for any one else to go into details on these topics. Dr. Young has written the ablest report on School Hygiene, in all its phases, that has been given to the public up to the present time, either in this country or in Europe. In this document he covers the entire ground, stating clearly and strongly his own positions, presenting the arguments that support his conclusions, and furnishing elaborate quotations from recognized authorities. It is a document which has been more generally read, quoted and commented upon by experts than any treatise yet issued upon this subject. It is a volume which has carried the good name of Maine to all countries interested in the education of the youth
at public expense. It should be in the hands of every school teacher and school official and should not only be read, but thoroughly, carefully and exhaustively studied.

With this explanation I feel at liberty to state in a dogmatic way my conclusions, referring the reader to the volume already named for details. It is true that in a few instances the recommendations given in this report do not agree with those made by Dr. Young, but they are not matters of vital importance, and each writer upon this subject should make such recommendations as are consistent with his own observations and experience.

There is a demand for a briefer statement of some of the essential principles in the selection of school lots and the erection of outhouses and school-buildings than Dr. Young's exhaustive treatise affords. A desire to meet this want must furnish the explanation for preparing this section of the report.

The statements made and the recommendations offered in this connection are addressed especially to rural and village communities. Any attempt to furnish detailed plans for buildings in cities, without an exact knowledge of the size, shape, location and surroundings of the lot, the system of sewerage, water supply, heating, etc., to be used, would be doomed to failure. For these reasons no attempt will be made to cover that field.

Those who are interested in the heating and ventilation of large school-buildings are referred to pages $283-362$ of the seventh annual report of the State Board of Health of the State of Maine.

## SCHOOL SITE.

In selecting a site for a school-building, the principal items to be considered are size, soil, drainage, sightliness, and location in the community using the schoolhouse. The lot should have an area of not less than one acre, and should have a frontage of about 180 feet and a depth of about 240 fect. It should not have beneath it a stratum of clay or ledge which will permit of ground-water standing in the yard, but should
have a light, porous, dry soil. It should be free from all decaying matter and all animal excrement.

The surface of the lot should slope gently toward the road or street. It should have a sufficient elevation so that all parts of it will drain naturally. If for any reason this result is not possible through natural means, artificial drainage should be supplied which will be ample to remove all surface and ground-water. The best lot is the one which is highest in the center and slopes gradually in all directions, and is higher than the immediate surrounding areas.

The lot selected should have as many natural features of beauty as possible. The outlook should be as interesting and varied as circumstances will permit. It should not be in a low, damp place. It is better that it should not be on the top of a bleak hill. A slightly rolling area. in a reasonably sheltered section is the most desirable. The building should be so located as to give a sunny playground and yet prevent, as far as possible, the direct rays of the sun from falling upon the desks during school hours.

Great care should be taken in selecting a lot for a school building either in the country or in a village, to have it so located that the school will be as little disturbed as possible by passing travel and by industries that are carried on in the community. Reasonably quiet surroundings are essential conditions to the best work in the class-room. The disadvantages of dust and other annoying conditions are too apparent to need special mention. A community cannot afford to sacrifice quality of soil, sightliness, elevation, drainage and quiet to the single item of central location.

The school building should be placed about 100 feet from the street or road and as near the center of the lot, from right to left, as the conformation of the ground will permit. In most school yards in the country the outhouses for the girls should be in one of the rear corners of the lot, and that for the boys in the opposite rear corner. The fence surrounding the rear of the lot and the sides, as far front as the rear of the
school building should be a close board fence about five feet high. The fences for the sides from a point opposite the rear of the building to the street or road should be about four feet high and of such construction as the means of the town will justify. There should be a strong, close board fence, seven feet high extending from the center of the rear of the building to the center of the rear board fence.

The walks should extend from the corners of the lot to the front of the building, and from the front of the building directly to the road or strect. No trees should be placed within fifty feet of the building. The area immediately in front of the school-house should be used for flower beds. The open spaces at the sides and rear should be used for playgrounds. A few trees should be planted near the boundary lines of the lot and in some instances trees may be advantageously planted in interior sections of the lot.

## WATER SUPPLY.

Every school building should be supplied with pure water. The best way of doing this is to have water conducted through pipes to the building from a spring that is some distance from any polluting agencies. Where this plan is not feasible for financial or other reasons, the next best method is to have a bored well of such depth as will render it practicably impossible for the water to be contaminated with surface water or filterings through the soil. Where a bored well is not practicable, then a well should be dug and every possible precaution used to prevent contaminating matter of any kind from reaching the well itself or the sources of its supply.

## OUTHOUSES.

The outhouses should be located, as bas already been indicated, in the rear corners of the school lot, one being assigned to the girls, and the other to the boys. These buildings should be substantially built, of such size and with such conveniences as will best serve the school for which they are
constructed. The vault should be a solid tank of masonary, plastered on the inside with cement. (See Figure A. in another section of this report.) If for any reason, this kind of a vault cannot be supplied, a wooden box, extending the entire length of the sittings, and about 20 inches deep and 24 inches wide should be furnished. In cases where a box is used, it should be lined with galvanized iron and great care should be taken to have the lining water tight. In both cases such an amount of dry soil or ashes should be frequently placed in the receptacle as will absorb all liquids in the vault and keep the excreta covered.

In outhouses provided with wooden boxes for vaults, the lower, rear portion of the building should be a heavy double door with hinges at the top, so arranged that it can be turned up against the wall and held in place by a clasp, while the box-vault is being emptied. These vaults should be thoroughly cleaned, at least, twice each term. When such precautions are taken, we shall be free from the fearful odors which sometimes are manifest not only on all parts of the school grounds but which penetrate even to the schoolroom itself.

If those who have charge of the erection of school buildings have any reason to fear that sufficient dry earth or ashes will not be applied to the contents of the vaults to absorb all liquids and keep all excreta thoroughly covered and that all this accumulation will not be removed at least twice each term, then they would better use the plans described below. These explanations and sketches are taken from the Report of State Board of Health of Maine for 1892-3. (See Figures B. and C.)
"There are some patented devices for using the dry earth, but without patronizing these, any carpenter or other person with only ordinary mechanical ingenuity can get up something which will give good results. All that is needed is a common closet, a supply of dry earth, a water-tight receptacle beneath, and a convenient way of disposing of its contents at quite frequent intervals.

The receptacle should be wholly above the surface of the ground, and may consist of a metallic-lined box, a half of a kerosene barrel with handles upon it for removal, or, which is better, a large galvanized iron pail.

The receptacle may be removed through a door in the back of the closet or in front of the seat, or, by having the seat hinged and made to button backward, it may be removed that way. The earth should be common garden or field loam, if considerably clayey all the better, but it must be finely pulverized. Road dust does well, but sand is not suitable. Coal ashes are also good. Whichever of these is used should be dry and screened through a sieve with about quarter inch meshes. The dry earth may be kept in a box or bin so arranged, where it can be, that it may be filled from the outside of the closet, or it is quite convenient to have one-half the seat hinged and beneath it the small compartment to hold the present supply of the earth. In this box or bin holding the earth there may be a small tin scoop which may be employed in sprinkling in the earth, a pint or more, each time the closet is used. The main thing is to use enough of the earth completely to absorb all liquids, and this requirement, of course, precludes the throwing of slops into the closet. One or two loads of dry earth will be needed annually for a small school. Figure $B$ in another part of the report shows the construction of this closet.

Figure C. shows a style of earth closet suitable for country school-buildings. It has a permanent catch-basin entirely above the surface of the ground built of brick laid in cement and lined with asphalt so that the water or moisture from the soil can have no entrance.

Within the closet is a bin for dry earth or coal ashes and a scoop by means of which it should be somebody's duty to sift daily or oftener a small quantity of the drying material over the deposit, -enough to keep the whole dry and odorless. At the rear of the vault is a door through which the inoffensive contents may be removed."

The outhouses should also be provided with windows, the bottom of which should not be less than five feet from the ground. The door should be of substantial construction and provided with a strong lock. The key should be in the custody of the teacher, and the doors should be locked each night. This duty may be performed by some of the older and more reliable boys. The building should also be surrounded with evergreens, in such a way as to conceal it from the road and the occupants of the schoolhouse. The entrance should be from the side facing the fence extending from the rear of the school building to the rear of the lot.

The plans given on subsequent pages of this report may be of service to those having such funds at their disposal as will warrant them in erecting more expensive outhouses than those described above. In cases where towns wish to build fire closets, or water closets and urinals supplied with running water, they should depend on experts to supply detailed directions for constructing these important adjuncts to every school-house.

## SCHOOL BUILIING.

The foundation walls for the school building should be of solid masonry, and extend to such a depth as to prevent their being affected by frost. The walls should be 1 foot thick and should have a vertical air space of 4 inches and be so thoroughly built as to exclude the cold to a considerable extent. There should be a suitable opening in the wall on each of the four sides to permit thorough ventilation during the spring, summer and fall months. Double shutters should be provided for these openings during the winter months. These conditions should obtain in all cases where it is not found expedient to have a basement, but wherever the funds are sufficient, a basement of not less than 8 feet in depth should be provided. This should be inclosed by the foundation walls, and the bottom should be covered with gravel and plastered with the best cement and such drainage should be
provided as will prevent water remaining in the basement during any part of the year.

The top of the foundation wall should be, at least, 3 feet 6 inches above the level of the ground. Above this should be placed the sills, and on these the building should be erected. In no case should school buildings exceed two stories in height. The reasons for this limitation have been given in so many reports and documents that it is unnecessary to recapitulate them at this time.

The exterior of the building should be simple in construction, yet dignified in its adornment, and devoid of all ornamentation which interferes with suitable lighting of the assem bly room.

While it is not desirable that school-buildings should present a marked similarity as to architecture or coloring, it is important that such colors be used on the exterior of schoolhouses as to render them not only durable but attractive to the eye. For this purpose, the colonial style of light yellow with white trimmings furnishes a happy combination, and is a change from the more somber browns that are now so common. The gray tints with darker trimmings and the light yellow with dark green trimmings are both serviceable and attractive. In some cases plain white walls with green blinds make a picture at once artistic and inexpensive.

The entrance to the honse should be protected by a suitable portico, of such construction as will permit the children to make use of it for shelter in stormy weather and serve as a protection from the sun on hot days. The entrance and halls should be of sufficient size to allow the free passage of the pupils to and from the schoolroom, and to insure perfect ventilation.

In single room school-buildings, if separate entries are provided for the boys and girls, they should be at least 8 feet square. In schoolhouses of more than one room these apartments must necessarily he more spacious. The hallways in all school-buildings, of more than one room, should be
wide enough to admit of the passing of double columns of children in opposite directions at the same time, with perfect freedom. In single room buildings, the hallways need not be more than 6 feet wide, while in school buildings of more than one room they should be not less than 8 feet.

Wardrobes should be large enough to furnish each child with a separate hook, so located that his clothing, when in place, will not come in close contact with that of any other child. A wardrobe for 25 pupils should have wall space equivalent to 25 feet in length, at least. These rooms need ventilation to even a greater extent than do the schoolrooms themselves.

Entries, wardrobes and halls should be located in such relations to the schoolroom that the teacher can stand at some one point and have a general oversight of them all. Special care should be taken not to have these rooms so located that a teacher must change her position to have all the children under her immediate supervision, because there are times during school hours when some of the children are in the entries, some in the hall leading to the schoolroom, and some in the wardrobe, while still others are in the assembly room.

Stairs should never be less than 5 feet wide, and in case of two or more schools in the same building, they should be from 6 to 7 teet wide. The risers should be from 6 to 7 inches high, and the treads about 12 inches wide. Circular stairs should never be built in a school building, and as few turns should be made in the stairs as possible. What is true with regard to the location of the anterooms is also true in regard to the stairways. They should be so arranged that a teacher may stand at one point and easily command the staircase, the halls and entrances. A great amount of confusion and unnecessary friction would be prevented by observing these very simple rules.

For further suggestions in relation to the items just discussed, see the plans which accompany this section of the report.

Schoolrooms should be from 2-3 to $3-4$ as wide as they are long. The length should not exceed 30 feet, a few feet less being preferable. The height of the schoolroom should be more than 11 feet and less than 14 feet. The floor space must be of such size as will give to each child not less than 20 square feet. If the schoolroom is 30 feet long, 20 feet wide and 12 feet high, it will contain 7,200 cubic fect of air space. If there are thirty pupils in attendance, this room will provide 240 cubic feet of air-space for each child. This is the minimum limit. No schoolroom should furnish a smaller air space for its pupils.

The teacher's platform should be at the side of the room which is not provided with windows, and should be not less than 5 feet wide and about 9 feet long. It should be about 9 inches high.

The aisles at the sides and rear of the room should be about 3 feet wide. The other aisles should be about 20 inches wide. If possible, there should be, at least, 5 feet of space between the front desk and the front edge of the teacher's platform.

The desks for the smaller scholars should be so placed that the edge of the desk next to and in front of the child, shall be 9 inches from the back of the seat in which he is seated. For intermediate grades, this distance should be 10 inches; in grammar grades, 11 or 12 inches; in high school grades, 12 or 13 inches. This is a matter of vital importance. Ninetenths of all the desks in the schoolhouses of Maine, and a large share of the other tenth are so far apart that children are forced to lean forward in unnatural positions to make use of the desk for writing, and even for studying.

The seats for the pupils in a schoolroom should be so arranged that they will face a wall in which there are no windows. If the walls are high enough, and the left hand wall is of sufficient length, the room may be lighted exclusively from the side on the left of the pupils when they are seated. But in most cases it is necessary to have windows in the wall at the left of the pupils when seated and also
in the rear wall, to give sufficient light, so that the pupils can perform their work without too serious strain on their eyes.

All things considered, it is best to have the school buildings face the south. If this plan is adopted the windows will be located on the east and north or west and north sides of the schoolroom. The windows should be supplied with opaque Naples yellow shades. When the sun is in the east, the curtains on the east side of the room should be drawn. The same is true of the west side in the afternoon. With these precautions against the direct rays of the sun, all parts of the room may be thoroughly lighted, and at the same time the cross lights which otherwise might be of great injury to the eyes of the children, would be avoided.

The bottom of the windows should be on a level with the eyes of the majority of the children occupying the room. They should extend to within about 6 inches of the ceiling. The windows at the sides should be massed, with narrow mullions between the different divisions. There should not be any windows in front of the front row of seats (not desks) in any schoolroom. It is better to have the glass the full size of the sash in all windows, instead of cut into small panes. It is believed if these simple rules are followed that our children will suffer much less in the future than they have in the past from improper lighting of schoolrooms.

For more extended particulars on this subject see the designs, plans and sketches in another part of this report.

The blackboards should be, at least, 3 feet 6 inches wide, and should extend entirely around the room, except in the spaces occupied by the doors and windows. The bottom of the board should be about 2 feet 6 inches from the floor. In schoolrooms used exclusively for primary grades, the bottom of the board should be about 2 feet from the floor, and in high school grades the bottom of the board should be about 3 feet from the floor. School buildings in rural communities should have the bottom of their blackboards about 2 feet 6 inches from the floor, to best accommodate all grades of pupils, provided the board is 3 feet 6 inches wide.

In many of our school-buildings too much attention has been given, and too much money has been expended on exterior decoration. While the appearance of a school-building is a matter of so much importance that it should receive carefulattention, and while it should be as attractive as the means of the community will justify, yet it is the interior of the building that will exert the greatest influence for good or evil in forming the tastes and developing the qualities of the children. The exterior should be comely and attractive. It should be devoid of any appearance of extravagant decoration. The finish for the cornice, windows, doors and porticoes should indicate taste, judgment and regard for architectural principles. The interior of the room depends more upon its coloring than upon any other single feature. The finish for the doors and windows should be plain, so that the least number of places for the accumulation of dust will be provided.

The room should be surrounded with a wainscoting extending from the lower part of the blackboard and windows to the floor. The spaces above the wainscoting and the ceiling should be plastered with mortar, the lime in which has been slaked and mixed with sand, at least, four weeks before it is used. During the time the mortar is being slaked it should be carefully protected from the sun and rain. If possible, the blackboard space should be covered with the best quality of slate. If this is not feasible the spaces should be covered with the best quality of adamantine plaster. At the lower edge of the blackboard, a moulding should be placed with a concave upper and a convex under surface, the trough part being used to hold the erasers and collect the chalk dust. The wainscoting should be of a light pearl tint. The wall spaces not occupied by the blackboards or wainscoting should be tinted a light cream, or very light gray, or light blueish gray, or light greenish yellow. It all cases, the tints should be of the lightest and most delicate shades. The ceiling should be either a clear white or a very delicate cream tint.

The floors should be of yellow birch. If this material is not within the means of the community, then a very superior
quality of spruce may be used. The floor surfaces should be "filled" with oil and treated with two coats of shellac. All schoolrooms should have double floors, with heavy building paper between, being careful to have the edges overlap so as to prevent all passage of air from the basement to the schoolroom.

There should be no thresholds used in any part of the building except beneath the outside doors. All other doors should swing level with the floor, and should be provided with transoms, at least, one foot in height. All interior doors should be, at least, 3 leet wide, and not less than 7 feet 6 inches high. All outside doors should swing outward, unless they are double hinged, so as to swing both ways.

## INTERIOR FINISH.

The interior finish of a schoolhouse should be of yellow birch, native oak, hard pine or a superior quality of spruce, the desirability of the woods being indicated by the order in which they are named. It is recommended that this wood be "filled" and covered with two coats of varnish, each coat being well rubbed down. In all interior finish it is desirable to have as smooth and plain a surface as possible for purposes of cleanliness. It is much better to have all the interior finish, including the doors, of the same kind of wood. If it is necessary to paint the interior wood the wainscoting should be of such a color as is produced by adding a small amount of raw sienna and chrome yellow to white paint giving the tint known to painters as "cream white" and the standing finish should be of a slightly darker shade of the same color.

## LIGIITING.

Much has been written on the subject of the proper lighting of schoolrooms. Quite a number of the leading authorities upon this matter claim that the light should come exclusively from the north, and that the other sides of the room should be solid walls. There are more things to be considered in a schoolroom than the simple question of the direction from
which the light shall enter the room. Thoughtful teachers have noticed that children are very much influenced by their feelings, and that the feelings of the average child are dependent upon the cheerfulness of the room in which he spends his school life. If only the north side of a room is provided with windows, the room is necessarily wanting in the elements of cheerfulness, and those conditions which are dependent upon the rays of the sun.

There can be no question but that the healthfulness and desirability of a schoolroom is very much increased by having the rays of the sun shine into it during some portion of the day. The flooding of the schoolroom with light will prevent or make impossible a great many diseases and a large number of discomforts. It will aid, to a large extent, in making the room a place where the children like to assemble and live. It will give an air and graciousness to the room that can be gained from no other source or sources. It is unwise to have the direct rays of the sun fall upon the children, and particularly upon their books or desks. It is also unwise to have cross rays striking upon the books used by the children. While all these things are true, it is also true that windows may be placed upon the east and north or west and north sides of the room, and gain all of the advantages that come from light, heat and cheerfulness of the sun without suffering from many of the disadvantages named above.

The principal light of the schoolroom is preferably taken from the north east, east or north; the preference being in the order in which the points of the compass are named. Windows facing directly south, or west should be avoided as far as possible.

If the windows are supplied with curtains that are opaque and of a light yellow tint, they can be so arranged that the direct rays can be cut off, the cross lights can be reduced to a minimum, and all the advantages of lighting from two sides and direct radiation can be gained without suffering many of its disudvantages. This whole question has been elaborately discussed by experts and is one of supreme importance.

After a careful consideration of all the facts, it is believed that it is better to have the window sills as high as the eyes of the children when seated; that the windows should extend to within 6 inches of the ceiling; that there should be no window in front of the front row of seats; and that the windows should be massed with narrow mullions between them.

All window sashes should be so constructed as to fit closely in their casings, and at the same time run easily. They should be supplied with pulleys, friction rollers and such weights as will permit them to be moved by a small child with ease. As a matter of economy, it is best to have all school-buildings supplied with double windows. The saving in fuel will be sufficient, in a reasonable length of time, to pay the added expense. If double windows are furnished, many of the discomforts arising from draughts will be prevented, and the windows can be used in such a way as to supplement the regular system of ventilation.

## DESKS.

Single desks should be furnished in all schoolrooms, the discomforts and annoyances arising from the use of double desks being so great as to practically prohibit their use in the common schools. The desk and the seat should be easily adjustable to meet the physical conditions of the child using the same. The seat should be of such construction as will fit the curvatures of the body and make it easy for the child to do his work in an erect position. The seat should be of such height as to permit his feet to be placed squarely upon the floor. The top of the desk should be adjustable, and should slant slightly toward the pupil, and be provided with a groove for holding pencils, and a covered ink well.

Those who are interested in this subject are referred to another part of this report for cuts of desks that have proved to be of special merit.

## VENTILATION.

The simplest and most effective form of ventilation in school buildings in rural communities is to have a cold air box extending from an opening in the foundation wall, under the floor, to a point immediately beneath the stove. This air shaft should be as short and direct as possible. It should be about 30 inches square for a single room building, and should be covered at both ends with a coarse wire netting and about one inch inside of this netting, sereens should be placed similar to those used in dwellinghouses to exclude flies. The opening beneath the stove should be provided with a slide which may be completely closed during the time the room is being cleansed or swept.

The stove should be surrounded by a Russia iron jacket which should be fastened securely to the floor, and should extend above the top of the stove, at least eight inches, and if the stove is not too high, this extension should be one foot. The sides of the jacket should not be at any point within six inches of the sides of the stove. By this very simple plan, fresh air is admitted to the room in any required volume, and is passed near the stove in such a way as to be warmed before it passes into the room, and thas insures those using the room a complete change of air as often as is necessary.

The ventilating flue or chimney for schoolhouses of one room should be 30 inches square on the inside. It has been found that it is best to have the smoke-stack made of thin cast iron or heavy sheet iron. 'This stack should be about 8 inches in diameter and placed in such position in the flue as to be most easily connected with the heating apparatus. The register which opens into the ventilating flue or chimney should be about 28 inches square, and should be covered with a coarse wire netting, bordered by a simple moulding on the outside. This opening should be within 2 inches of the floor.

Any schoolhouse provided with these simple appliances for securing fresh air, and taking from the room the foul air, will be reasonably well ventilated at all times when the stove
is used for heating purposes. At other seasons it will be necessary to ventilate through the windows and doors, or to have the register so arranged that it may be removed and a large kerosene lamp placed in the bottom of the ventilating shaft. The heat generated by the lamp will be sufficient to insure an upward current of such force as to remove the vitiated air from the room.

The value of an open fireplace in a schoolroom cannot be overstated. The cost of its construction is small. The expense of supplying fuel in Maine for many years to come will not be large enough to be a serious item, and the benefits that would follow its general use would more than compensate for any investments that might be made in this direction. If a schoolroom is supplied with a fireplace and the chimney is thoroughly warmed once during the day, a sufficient current will be produced to make it one of the most efficient means of ventilation that can be devised. All school officials in Maine are so familiar with the open fireplace that it is not necessary at this time to enter into a detailed description of their location, construction or value. Every reasonable effort should be made to have all schoolhouses which are erected in the future supplied with fireplaces. It is even recommended that school officials make the attempt to secure from the community using the schoolroom sufficient voluntary contributions to provide one of these heating appliances in every schoolroom in the rural sections of the State. Fireplaces more than pay for their construction and maintenance by the added cheerfulness and attractiveness which they give to the room itself. If a room is supplied with an open fireplace, the bright crackling fire produces an atmosphere so homelike that the children are unconsciously influenced not only to better conduct and better states and condition of feeling, but to added industry and faithfulness.

When all these means have been used, there is one other precaution that should not be neglected. All schoolrooms should be opened, at least, fifteen minutes in the morning, a few minutes during the recesses, not less than fifteen minutes
at noon, and not less than half an hour, and better still threequarters of an hour after the close of school at night. At these times the doors and windows should all be wide open, and every facility furnished for the free passage of the air into, through and out of the schoolroom. School officials should see to it that the above requirements are faithfully observed by their teachers, and their observance of these instructions should be one of the conditions upon which they are retained.

It takes very much less time to heat a room that is filled with pure than with impure air. If one has but an hour to heat a room, and the room is filled with impure air, he can save time and fuel by using at least one-third of that time in thoroughly ventilating the room and the remainder in heating it. If a room is not ventilated at the close of the session the impurities in the air will settle, to a considerable extent, into the walls. When the room is heated the next morning, some of these impurities will leave the walls and will again float in the heated air and will be breathed over and over by the persons using the room.

If the town has the necessary funds, a basement should be built in which should be placed the heating apparatus, together with the fuel.

In an article prepared by the Department of Public Instruction of New York, the following principles are laid down for the instruction of those having charge of the erection of buildings of two, four, six or eight rooms.

1. Two hundred cubic feet of air should be allowed for each scholar, provided the air is changed continuously.
2. The foul air should be taken out of the rooms at or near the floor.
3. The ventilating flue should be of sufficient capacity to take out the foul air.
4. The ventilating flues should always be heated, to be of any value in exhausting air.
5. The supply of fresh air must be sufficient to compensate for that taken out by the foul air shaft.

By the courtesy of Dr. A. G. Young, Secretary of the State Board of Health of Maine, this Department is able to present in this Report plans of schoolhouses, systems of ventilation, suggestions for seating pupils, and methods of heating schoolrooms. The designs, drawings, plans and explanations furnished by Dr. Young are of the highest value. It is hoped that they will be carefully examined and studied, and that those who are interested in these subjects will apply to the Secretary for a copy of his report for 1891. This document should be in the hands of every person who is or is to be responsible for the housing and training of the children in the public schools of Maine, so that in the future when buildings are erected, school officials will take advantage of the studies which have been made in this field and be able to save the children from the punishments which have been inflicted upon them in the past, by providing such buildings as will enable them to perform their work with the greatest efficiency and with the least hindrance and suffering.


Figure A.
Section"through Vault for Small School Houses. Coombs, Gibbs and Wilkinson, Architects, Lewiston, Me.


Figure B.
(For explanation see page 95. )

section.


Figure C.
(For explanation see page 95. )

- AEPSPETTME SHETRH O

U WHITTIER • SCHOOL-HOUSE ×

- COOMBS GBBDS 全 WILKINSON*
- ARCHITECTIS.

LEWISTON: ME.


Floor Plan of Whittier School House.
Coombs, Gibbs and Wilkinson, Architects, Lewiston, Me.

##  <br> - APCHITECTS: <br> Leworar: ME:-



Floor Plan of Longfellow School House.
Coombs, Gibbs and Wilkinson, Architects, Lewiston, Me.



Floor Plan of Garfield School Building-two rooms.
Coombs, Gibbs and Wilkinson, Architects, Lewiston, Me.


Floor Plan of Garfield School Building-three rooms.
Coombs, Gibbs and Wilkinson, Architects, Lewiston, Me.



- COOMRS, GIBOS 份 WILSTINSON.
- APRCHITE CTS.
- LEWISTONS •ME.
- BYSEMENT - FLOOR-PLINA


























Figure i.


Figure il.


Figure iII.


Figure iv.


Figure v.

## STATE AND DISTRICT SUPERINTENDENTS' MEETINGS.

There have been held, during the past year, six district and two State meetings of the superintendents of schools. The district meetings were held at such points as would admit of the largest attendance with the shortest distances of travel. The State meetings were held in Augusta, one on the 19th of May, and the other on the 31st of August and the 1 st of September.

The district meetings were devoted to a consideration of the present condition of the schools, and the means of improving school yards, outhouses and schoolhouses. Some time was also given to interpreting the school law, and to discussing the difficulties encountered by superintendents in the discharge of their duties.

The discussions were informal, no attempt being made to present elaborate and unserviceable theories. There was the greatest freedom on the part of superintendents in stating their observations, experiences and opinions.

No one seemed to feel responsible for converting another to his views. Each seemed to be anxious to learn some better way of performing the work which devolved upon him. The meetings were an experiment, but they were so much more successful than was anticipated that it is expected that arrangements will be made for continuing them, if the increasing duties of the office will permit.

The State meeting held in Augusta in May was composed of superintendents of the city schools. The entire session was devoted to the questions, "A uniform system of designating the grades or classes in the elementary and secondary schools ;" "A minimum standard of promotion from one grade to another ;" and "A minimum course of study for the elementary schools."

This meeting was peculiarly valuable in that it secured the adoption of a uniform system of designating the classes. One
of the unfortunate features of our city systems of schools has been that they were so entirely independent of each other in their courses of study, and systems of designating classes, that it was with great difficulty that a pupil could be transferred from the schools of one city to those of another without suffering loss of time in adjusting himself to his new conditions.

It was hoped that there might be published in this Report, a minimum course of study for the elementary schools of the State. It has been found impossible to do this, as some of the committees appointed to take charge of the different studies have been unable to prepare the work and furnish the department with the necessary outlines. It is expected that in the near future the course will be completed, and the State will have a standard course of study, covering all the grades below the high school, which will be accepted as a minimum course in all the cities, in the promotion of pupils from one grade to another and in transferring pupils from one city to the schools of another.

The entire attendance at all the meetings aggregated about one-third of all the superintendents in the State. They showed a most hearty sympathy with the latest and best ideas upon all questions connected with school work, and were keenly alive to the deficiencies of their schools, the weaknesses of their teachers, and the unfortunate conditions which exist in some departments of their work.

One cannot resist the feeling that these meetings must serve in helping those who have charge of the supervision of the schools of the State in managing their schools in a more acceptable and useful way in the future. Among the specially encouraging features that might be mentioned in connection with the revelations that came from these meetings was the thoughtfulness of some of the superintendents, their absorbing interest in their work, their knowledge of modern methods, their familiarity with the best writers on school questions, and their evident desire to make use of every opportunity to
improve the teaching in their schools and make them more useful to the children.

It is a matter of simple justice and also of great pleasure on the part of the State Superintendent to express his most cordial appreciation of the rare tact, and superior judgment manifested by some of these men and women in meeting the trying questions which come to them in the performance of their duties.

The following circulars may help to give persons interested in this matter additional information concerning the scope and character of these gatherings.

## STATE OF MAINE.

EDUCATIONAL DEPARTMENT.
Augusta,
1896.

To the Superintendent of Schools of
Dear Sir:-You are requested to meet the State Superintendent of Common Schools at in
at o'clock in the noon, for a conference in relation to the school affairs of your town. Please bring with you a copy of the last Report of this department, or the Course of Study prepared for the Public Schools of Maine, and a copy of the School Laws of the State.

As the object of this consultation is to consider ways and means for improving your schools, you may charge your town with the time spent and the expense incurred in attending this meeting.

Respectfully,
W. W. STETSON,

State Superintendent of Common Schools.

## STATE OF MAINE.

## educational department.

Augusta, June 23, 1896.
To the Superintendent of Schools:
The interest shown and the work done at the meetings of the superintendents of the rural towns, which have been held during the past few months, have convinced me that there are a great many questions connected with your duties which need careful and skillful consideration if you are to do such work for your schools as will make them reasonably successful.

After a careful study of the matter I am persuaded that a mass meeting of all the superintendents, having charge of rural schools, for the purpose of discussing the questions that specially concern them, would result in great benefit to the educational interests of the State. Arrangements will be made for such conferences, and discussions of vital questions by experts, that the meeting must prove exceedingly useful to those who attend.

That the department may know how many of the superintendents will attend, you are requested to indicate on the enclosed card your decision in the matter. It is understood that your reply is made on the condition that the railroads will allow those attending this meeting substantially the same rates as are given those who attend the State Fair at Lewiston during the same week, and that the hotels in Augusta shall furnish entertainment to members for one dollar a day.

I hope that you will consider this matter carefully, that you will appreciate the good you may receive from this meeting, the added service which you would be able to render your schools, and decide to attend if it is possible for you to do so. I realize that the sum paid you for your official services is small, but a better service usually brings a larger salary. Are you willing to make one experiment in testing the soundness of this theory?

Will you please return the enclosed card promptly, with such answer as you think the circumstances warrant you in making.

The authorized edition of the report of this department for 1895 is nearly exhausted. A general interest has been manifested in the section of the report which treats of the condition of the rural schools of the State. Because of these facts it has been decided to issue these pages of the report in pamphlet form, provided the superintendents are willing to distribute the documents if they are sent to them free of expense.

Will you please fill the blank referring to this matter, on the enclosed card, and see that it is mailed at the earliest possible date.

> Respectfully,
> W. W. STETSON,
> State Superintendent of Common Schools.

## STATE OF MAINE.

educational department.
Acgusta, May 29, 1896.
At a meeting of the superintendents of the city schools, held in Senate Chamber, May 19, 1896, the following questions were discussed, and the decisions given below were voted.

## TOPICS DISCUSSEI).

A uniform system of designating the grades or.classes in the public schools of the State.

A minimum Course of Study for the elementary and secondary schools of the cities of the State.

A basis for promotion from one grade to another.

## A UNIFORM SYSTEM OF DESIGNATING CLASSES.

It was unanimously voted to designate the grades below the high school as first grade, second grade, third grade, fourth grade, fifth grade, sixth grade, seventh grade, eighth grade,
ninth grade ; the first grade being the lowest. Fourteen votes were given in favor of a course consisting of nine grades with one year's work in each grade. Two superintendents were in favor of an eight years' course.

## DESIGNATION OF CLASSES IN THE HIGH SCHOOL.

Four superintendents were in favor of designating the classes in the high school by the terms used in our colleges, i. e., freshmen, sophomores, juniors, seniors. Seven were in favor of having the classes known as grades ten, eleven, twelve and thirteen. Two were in favor of designating them as first, second, third and fourth classes, the first class being the highest class. Four were in favor of designating them as first, second, third and fourth classes, the first being the lowest class in the school.

## ADMISSION OF PUPILS TO THE FIRST GRADE.

Of the cities represented, five reported that pupils were admitted to the first grade in September only; eleven that pupils were admitted at the beginning of the spring term to the sub-primary grade. Ten of the superintendents voted in favor of admitting pupils to the first grade in September only.

## WORK TO BE DONE IN THE ELEMENTARY SCHOOLS.

## Mathematics.

Four superintendents favored having elementary algebra and geometry taught in the elementary schools. Three were in favor of omitting the algebra, and taking the geometry. Five were in favor of giving instruction in algebra and geometry, but that text-books should not be placed in the hands of the pupils.

All the superintendents voted in favor of completing the work in arithmetic in the elementary schools. A large majority were in favor of omitting the most of the work in the complete arithmetic which usually follows in the applica-
tions of percentage, with the exception of one practical method of extracting square and cube roots. All favored omitting foreign exchange, permutations, allegation, progressions, partnership and mensuration.

## Geography.

Nine votes were cast in favor of the proposition to add work in physical geography to the regular work of the last year in this subject in the elementary schools. Four votes were opposed to adding this study. There was practically a unanimous vote in fiavor of commencing the work in geography in the third grade and continuing it through this grade, without the use of a text-book; that the primary geography should be used by the pupils during the fourth and fifth grades, and that the complete geography should be used by the pupils during the sixth and seventh grades. During the ninth grade, as has already been indicated, some favored taking work in physical geography, the work to be selected by the teacher, and others favored giving the time which would thus be devoted to this branch, to algebra or geometry, or both.

## Language.

It was unanimously voted that a complete grammar should be mastered by the pupils before entering the high school. Ten votes were cast in favor of teaching analysis and parsing in the eighth and ninth grades. Five votes were cast in favor of teaching technical grammar one year only. One vote was cast in favor of teaching technical grammar for two years, one for three years, one for four years, and one for five years.

It was unanimously voted that language lessons should be given in all the grades. Two votes were cast in favor of giving instruction in Latin in the grades below the high school.

## History.

All the superintendents were in favor of using bistory stories, sketches of noted men and events, and primary histories in the fourth, fifth and sixth grades.

A majority of the superintendents favored using a textbook on American history in the seventh and eighth grades, and a text-book on English history for the ninth grade. A few favored teaching American history during the seventh, eighth and ninth grades.

## Promotıons.

In the matter of promotions, four voted that pupils should be promoted entirely on the judgment of the teacher. All voted in favor of some system of ranking pupils in the several studies pursued by them. Five were in favor of daily ranks, one, weekly ranks, one, monthly ranks, thirteen, monthly reviews, these reviews to be so given that only one branch is reviewed each week, and that this review cover the essential points taken during the preceding four weeks. All expressed a willingness to promote pupils on the basis of allowing onehalf for the rank attained in examinations, and one-half for the judgment of the teacher.

> W. W. STETSON, State Superintendent of Common Schools.

## STATE OF MAINE.

## EDUCATIONAL DEPARTMENT.

Augusta, June 22, 1896.
The meeting of the superintendents of the city schools of Maine, held in the Senate Chamber May 19, 1896, was so largely attended, and so much interest was shown in the subjects discussed, and so many conclusions of importance were reached, that I feel justified in the attempt to continue the work, and to have prepared a Course of Study which shall combine the experience and wisdom of the city superintendents of the State, and shall be accepted, to some extent, as a standard of the work to be done in our elementary schools.

As there was not time for arranging the details on the day of the meeting, as many of the members had to leave on the
afternoon train, I have taken the responsibility of forming committees of the superintendents, and asking them to prepare a Course of Study in the studies assigned to each.

Enclosed will be found the report of the meeting of May 19th. I submit the following suggestions for consideration, i. e.: that the members of the various committees consider carefully the several votes taken by the superintendents at the Augusta meeting, and give such weight to each, as in their judgment they merit; that the Course of Study be a skeleton outline, somewhat after the plan adopted by Supt. A. G. Lane of Chicago, in his last Course of Study for the schools of that city ; that the course be so written as to be independent of any particular set or sets of text-looks. The Chicago course enumerates the studies to be taken in each grade, and names the topics to be considered in each study. There is no attempt to combine with this outline suggestions as to the methods to be used in teaching any subject.

I feel that it will be very helpful to the teachers, if the superintendents will accompany the outline for each grade with a list of books which may be used for supplementary work by the pupils, and also a list of books which may be used by the teachers in learning additional facts or new methods.

Believing that you can render a great service to the teachers and children of the State by assisting in this work, I urge you to accept the assignment given below, and to coöperate promptly, so that the Course of Study may be printed early in September.

## Committee on Mathematics and Penmanship.

O. M. Lord, Portland; S. I. Graves, Augusta ; S. E. Webber, Calais.

Committee on History and Nature Studies.
I. C. Phillips, Lewiston; A. P. Wagg, Auburn ; C. S. Holton, Eastport.

Committee on Geography and General Exercises.
Mary S. Snow, Bangor ; H. A. Moore, Ellsworth ; M. M. Curtis, Brewer.

Committee on Language, Morals and Manners.
F. E. C. Robbins, Woodford's; W. H. Winslow, Bath; W. L. Waters, Waterville.

Committee on Reading, Civics and Music.
A. P. Irving, Rockland; A. F. Marsh, Orono; Superintendent of Belfast.

Committee on Drawing and Physical Culture.
John S. Locke, Saco; R. E. Gould, Biddeford ; J. M. Wyman, Augusta.

Committee on Spelling, Physiology and Hygiene.
J. E. Cochrane, Hallowell ; J. M. Larrabee, Gardiner.

The spirit of the meeting at Augusta warrants me in feeling that this matter will receive your best thought, and I am confident that you will formulate a Course of Study through your combined efforts that will be a credit to the State and of value to the schools.

It is requested that you forward the manuscripts to this department as soon as they are prepared, so that they may be placed in the hands of the printer at the earliest possible date.

> W. W. STEŢSON.

State Superintendent of Common Schools.

## STATE EXAMINATION AND CERTIFICATION OF TEACHERS.

The Legislature of 1895 having made provision for the examination and certification of teachers by the State Superintendent of Common Schools, circulars were sent to all teachers who indicated a desire to take such an examination.

As the circular and the blank for preliminary examination were printed in the report of this department for 1895 , it is unnecessary to reproduce them here.

Blanks properly filled out were received from sixty-eight candidates and examinations were held on December 30th and 31st at the following named places, viz: Portland, Brunswick, Augusta, Bangor and Houlton.

The following instructions were issued to the persons conducting the examinations.

## INSTRUCTIONS TO EXAMINERS.

The examiners are requested to return to this department, by express, the paper not used by the candidates, the papers written by the candidates, and all examination questions.

It is requested that candidates shall not be allowed to sit within six feet of each other. If candidates attempt in any way to secure information which will assist them in answering the questions given, the papers of such candidates shall be taken up, and a statement indorsed upon them covering the facts.

Enclosed will be found a program of the hours when each examination is to be given. It is requested that the limits set in this program be observed in giving the examinations. In no case is the examination to be given except during the hours named in the program.

The envelopes with cards enclosed, on which numbers are written, are to be distributed one to each candidate. The candidate is to write her name and the number that is found
on the outside of the envelope on the enclosed card, place the card in the envelope, seal the envelope, and return it to the examiner before she commences her examination. These envelopes are to be returned to the department with the other papers. Each candidate is to write her number at the top of each sheet of paper written, together with the subject of the examination.

The examiner is requested not to answer any questions concerning the questions given in the examinations. If such questions are asked, the examiner will please notify the candidate of the above request.
W. W. STETSON, Superintendent.

The examinations were conducted according to the following program and directions to candidates.

## PROGRAM.

The examiner must not allow any candidate to write any examination except during the period assigned it in this program.

December 30, A. M. 8-40 to 9 Distributing "Directions," and envelopes containing cards. Candidates to write their numbers, names and post office addresses on the cards, enclose them in the envelopes, seal and return to the examiner. 9 to $9-30$, reading; 9-30 to $9-50$, orthography; $9-50$ to 10-20, penmanship; $10-20$ to 12, English grammar and composition.
P. M. 1 to 2, literature; 2 to 3 , arithmetic; 3 to 3-45, geography ; 3-45 to 4-30, United States history.

December 31, A. M. 9 to 10-20, civil government; $10-20$ to 11-20, physiology and hygiene; 11-20 to 12-30, natural sciences.
P. M. 1-30 to 2-30, theory and practice of teaching; $2-30$ to $3-15$, school law; $3-15$ to $4-30$, thesis of not
less than four hundred words on, "Why and how to study children."

## DIRECTIONS TO CANDIDATES.

1. Write on the card, which you will find in the envelope handed you by the examiner, the number written on the outside of the envelope, and your full name and post office address.
2. Inclose this card in the envelope, seal and return it to the examiner.
3. At the top of each sheet of paper used in the examination write your number and the subject of the examination. Do not write your name on any examination paper.
4. Write your examinations with pen and ink.
5. Do not write in the margin.
6. Place before the answers the same figures as used before the questions.
7. Write on one side of the paper only.
8. Make your answers as brief as a complete statement of the idea intended will allow.
9. Bind the questions and sheets of paper of each examination at the upper left hand corner, using the fasteners furnished by the examiner. Do not ask questions or explanations of the examiner. He is instructed not to give any information in relation to the printed questions:
W. W. STETSON, Superintendent.

Thirty-seven candidates took the examination and of these seven only obtained a rank sufficient to entitle them to a State certificate.

One teacher only received a certificate of the first grade, while to the other six second grade certificates were issued. Every teacher who took the examination was furnished with a statement of the rank obtained in the several branches upon the following form.

## STATE OF MAINE.

EDUCATIONAL DEPARTMENT.
No.
Name
Post Office
RANK.
Reading,
Physics,
Orthography, Astronomy,
Penmanship, Botany,
Eng. Gram. and Comp'n, Zoology, Literature, Geology, Arithmetic, Chemistry, Geography, U. S. History, Eng. and Rom. History, Rhetoric, Civil Gov., Political Economy, Phys. and Hygiene, Psychology, El. Nat. Sciences, French, The'y and Pract'e of Teach'g, School Laws of Maine, German, Latin, Algeinra, Greek, Geometry, Thesis.
Note:-To be entitled to a State Certificate, the candidate must attain an average rank of 75 and must not fall below 60 in any branch.
W. W. STETSON,

State Superintendent of Common Scchools.
Augusta, 189

The names of the successful candidates are as follows: Will Osmar Hersey, Bridgton, First Grade ; Lizzie N. Freeman, Pittsfield, Second Grade ; Grace E. Preble, Woolwich, Second Grade; Hettie F. Remick, Ellsworth, Second Grade ; Jessie Maria Shackford, Saco, Second Grade; Jennie M. Stetson, East Sumner, Second Grade ; J. Alvah Tuttle, Freeport, Second Grade.

Mr. Hersey is a graduate of Bowdoin College, Miss Preble and Mr. Tuttle, of Gorham Normal School, Miss Stetson, of Farmington Normal School, Miss Shackford, of Thornton Academy, while Miss Freemam and Miss Remick are not graduates of any institution of standard grade.

The State certificates are handsome diplomas, printed upon fine parchment paper seventeen by twenty-two inches in size.

The heading has the words "State Teacher's Certificate, Educational Department," intertwined with a pine branch, showing the pine cone and tassel, the floral emblem of Maine, and also, in a central position, the coat of arms of the State.

Below this, in handsome copper-plate letters, is the following inscription: "This is to certify that__ has passed a satisfactory examination in the branches of study required for a——Grade State Certificate, and has furnished satisfactory evidence of good moral character and distinguished success in teaching, and is entitled to this certificate of Eminent Qualifications, which authorizes_-_to teach in any__School in this State for

In witness whereof, I have hereunto affixed my signature and seal of office at the city of Augusta, this day of in the year of our Lord one thousand eight hundred ninety

> State Superintendent of Common Schools.
L. s.

While but a comparatively small number of teachers succeeded in obtaining a rank sufficient to entitle them to a State Certificate, yet by this first examination the necessary requirements were made more generally known among the teachers of the State, and doubtless at the next examination a much larger number of candidates will pass the test.

## SUMMER SCHOOLS.

Summer schools were held at Orono in the State college buildings, at Saco in Thornton Academy, at IIoulton in Ricker Classical Institute, and at East Machias in the auditorium of the Methodist Camp Meeting Association of Washington county.

The attendance was larger than in any previous year. Over eighty per cent. of the one thousand students enrolled are teaching in rural or village schools. The interest in this department of work is increasing, and the facilities offered for the better training of teachers for their labors have been greatly improved within the past few years. These schools are rendering a great service to the teachers, and it is apparent that they are beginning to appreciate them at their true worth. It is hoped that such an appropriation will be made by the next legislature for this purpose as will enable the department to carry on these schools in a way to be more largely useful in the future than they have been in the past.

The circular given below contains a brief statement of the subjects taught, and the methods used in the several schools.

## STATE OF MAINE.

## EDUCATIONAL IEPARTMENT.

Augusta, April 6, 1896.
It has been decided to hold Summer Schools at the Maine State College, commencing July 13th and continuing three weeks ; at Saco, commencing July 20th and continuing two weeks; at Houlton, commencing August 3rd and continuing two weeks, and at Machias, commencing August 17 th and continuing two weeks.

The first session of each school will begin at 1.30 P. M. on the day named for the opening of that school. Certificates will be issued to those members only who are present for the me the school attended is in session.

The subjects in which instruction will be given are grouped under four general heads: Nature Studies, Common School Studies, Special Branches, and Miscellaneous.

Under "Nature Studies" are included work and methods in zoology, physics, chemistry, botany, and mineralogy.

The "Common School Studies," embrace instruction in, and methods of teaching arithmetic, grammar, geography, history and reading.

Under "Special Branches" are classed music, physical culture, drawing, physiology and hygiene and civics.

Under "Miscellaneous" are grouped English language and literature, pedagogy, elementary psychology, art in the common schools, and the course of study.

Arrangements will be made so that the hours assigned for the suljects coming under any one of the four general heads, given above, will not conflict, and so far as possible, the programs will be so written that those who wish to take work in more than one group may do so. Experience has made it clear that the most of the teachers desire to take up some definite line of study, and complete this work with reasonable thoroughness. For this reason the subjects have been grouped, as above stated, and teachers will be given an opportunity to take thorough and extended work in each group. This plan will give definiteness and symmetry to the work as well as enable those who enter the schools this year to commence at the beginning and advance as rapidly as their attainments will permit, and next year take more advanced work, and also permit those who attended last year to take the advanced work this year and go on with it still farther in the future, if they so desire.

## NATURE STUDIES.

For the course in nature studies a series of lessons has been prepared, covering some of the simple principles of physics and chemistry, and embracing observation work in zoology, botany and mineralogy. A printed synopsis of the lessons will be furnished to those teachers who elect the science work, and the printed summary will be expanded and ex-
plained in a course of lectures. The compiler of the lessons has examined, critically, a large number of the latest books bearing on object lessons in elementary science. The results of his study will be communicated to the teachers, who will derive from these efforts valuable assistance in the choice of books for private study and class-room use.

The series of lessons has been arranged with a view to meeting the needs of those hard worked and enthusiastic teachers who recognize the great value of science instruction, but are deterred from trying to teach it because of simited facilitics for procuring materials and apparatus. The methods adopted are the simplest and most direct, and the material required can be provided at nominal expense. The animals chosen for study are the cat, the dog and other familiar pets. Lessons in botany deal with the common seeds and plants. The work in mineralogy is limited to the study of specimens easily found in Maine. The exercises in chemistry and physics treat of electricity, heat, the flame, solution, etc. The apparatus used in all cases will be of the simplest construction and can be duplicated by any teacher, largely through his own efforts and at very small expense.

## COMMON SCHOOL STUDIES.

The work in this group will be devoted to a study of the facts to be taught in each branch, and a careful statement and illustration of the methods to be used in teaching these facts in the common schools. The persons having charge of this work are men and women of large experience, and thoroughly familiar with the limitations and needs of the common schools.

## SPECIAL BRANCHES

The work in music, physical culture, and drawing will be conducted as class exercises. The instruction in civics, and physiology and hygiene will be given in the form of talks and printed outlines. An attempt will be made to give the teachers definite ideas as to what'should be taught in each of these
subjects in the public schools, and the methods that have proved most successful in giving instruction in the same.

## MISCELLANEOUS.

The work in English language and literature will be conducted by the instructor who had charge of it last year. Those who were under his instruction at that time will need no urging to attend this year. Those who were not, can feel assured that a rare opportunity will be presented them to acquire a more definite knowledge and a larger appreciation of our language and literature than they now possess. Superintendents are looking more critically to teachers' qualifications in these particulars than ever before, and the teacher who knows something of our language, appreciates somewhat of its strength and beauty, knows how to study it and how to secure a reasonable mastery of it; who knows what to read, has some intelligent ideas of how to read, is immeasurably better qualified to do acceptable work than one who is wanting in these essentials.

The work in pedagogy and elementary psychology will be given in the form of familiar talks, Round Tables, conferences and printed outlines.

At each of the Summer Schools the Course of Study, which has been prepared for rural, primary, grammar and high schools, will be taken up and explained in detail. The books to be used for supplementary work by the pupils, the books which teachers may use in better preparing themselves for their work, and the "Suggestions and Explanations" that accompany the course will be carefully considered, and an effort will be made to put the whole matter in such form as will help to make the course of study usable in our common schools.

The work of each instructor will be arranged with special reference to assisting the tachers to follow the course in their schools.

## ART IN PUBLIC SCHOOLS.

A series of talks will be given on decorating schoolrooms, and interpreting pictures. These talks will be illustrated with engravings, etchings, photogravures and photographs of some of the masterpieces of famous artists. It will be the purpose of these talks to aid teachers in their efforts to make their schoolrooms more attractive and assist them in judging, reading and appreciating worls of art.

## VALUE OF SUMMER SCHOOLS.

It is not necessary to call the attention of school officials and teachers to the fact that the teachers who are holding the best positions to-day. and those who are ambitious to occupy these positions in the future, are the teachers who are most interested in these schools, and compose the largest part of the attendants. All teachers who desire to perform their work in such a way as to be serviceable to the children, realize that these institutions furnish excellent opportunities for training. It is hoped that the teachers of Maine, more largely than ever before, will show their appreciation of the appropriation the State has made in their behalf, and will use the means offered them to become skilled instructors of the youth.

## INSTRUCTORS.

The following named persons have been secured as instructors in these schools. English language and literature : Prof. A. J. Roherts, Colby University. Nature Studies: Daniel E. Owen, Thornton Academy ; Mr. A. L. Lane, Coburn Classical Institute, Waterville; W. G. Mallett, Farmington Normal School.

Common School Branches: F. L. Lane, Castine Normal School; Miss Mabel I. Jenkins, Willimantic State Normal School, Rhode Island; Mr. L. M. Felch, Ricker Classical Institute.

Special Branches : Pedagogy, Dr. C. C. Rounds, Plymouth, New Humpshire ; Prin. W. J. Corthell, Gorham Normal

School ; Mr. Will S. Monroe, Palo Alto, California; Prin. A. F. Richardson, Castine Normal School ; Drawing, Mr. J. A. Frizzell, Instructor in Drawing in the Public Schools of Saco; Miss Katherine E. Rounds, Plymouth, New Hampshire ; Music, N. L. Mower, Instructor of Music in the Auburn Public School ; Physical Culture, Miss Jennie M. Colby, Watertown, Mass.; Mrs. A. M. Thomas, Houlton.

Arrangements are being made for specialists to take charge of the other suljects for which instructors have not been assigned in the above lists.

## LECTURERS.

The following named persons have been engaged to deliver lectures during the sessions of the various schools: President A. W. Harris of the State Colloge; President George C. Chase, Bates College ; Dr. A. E. Winship, of the New England Journal of Education ; Professor A. J. Roberts, Colly ; Mr. Will S. Monroe, Palo Alto, California; Principal W. J. Corthell, Gorham; Mr. A. L. Lane, Coburn Classical Institute.

It is expected that several other well known educators will be secured for lectures and talks. The State Superintendent feels that the teachers of Maine are to be congratulated upon having so many distinguished educators eonnected with the Summer Schools.

Certificates will be issued to teachers who attend one of these schools. Diplomas will be granted to those who hold four of these certificates.

The tuition is free. The printed syllabi, list of books, etc., are furnished by the State. The expenses of the teachers are limited to traveling fees and board.

Will you please write the State Superintendent, stating the group of studies you intend to take, and giving the name of the school you expect to attend.

It is suggested that the teachers bring with them such books as they have, treating of the subjects they wish to study.

For information in regard to board, rooms, etc., please address Prof. H. M. Estabrooke, Orono; Supt. John S. Locke, Saco; Mr. J. H. Bell, Whiting; or Prin. A. M. Thomas, Houlton.

For farther information apply to

W. W. STETSON, State Superintendent of Common Schools.

## 'TEACHERS' INSTITUTES.

A large number of teachers' institutes have been held during the past year, the largest, probably, in the history of these associations. The call for more meetings, the reorganization of dormant institutes, and the largely increased attendance at these gatherings are among the especially encouraging features of this work. With a single exception the meetings have been so large as to fill to their utwost capacity the rooms in which the associations have been held.

The teachers show an increasing willingness to take part in the exercises and are bringing to the meetings many specimens of the work of their pupils. The changes which have been made in the subjects discussed, and the methods of treating them, have proved highly successful. The opening papers upon each topic have not exceeded, as a rule, ten minutes, and ample time has been allowed for discussing the points presented by the first speaker, and the general subject under discussion. The plan of taking up some line of school work, and devoting the several sessions to the different questions which are closely connected with the general subject has proved preëminently satisfactory.

These meetings, like the Summer Schools, have become more definite in their methods of work, more direct and practical in the papers read and the discussions given. The increase in the attendance and interest have heen so marked that the advantages derived from these gatherings must be of
great service in improving the schools along the lines in which it is believed they are so conspicuously weak.

The programs which are given below will give an idea of the changes which have been effected in this department of work. Each program was prepared for a meeting of two days.

## PROGRAM.

Language in the kindergarten.
Language in the primary grades.
What we are doing to give the pupils power of expression in good English, and to develop in them the love for reading good literature as it pertains to grammar grades ;

To rural schools.
English grammar.
Books and reading.
Power of expression and good reading in high Schools. Teaching English.

## PROGRAM.

Prayer. Music. Address of Welcome. Response by the President. English in the Primary Grades. Discussion. English in the Intermediate Grades. Discussion. English in the Ungraded Schools. Discussion. English in Grammar Grades. Discussion. Informal Discussion.

Music. Reading. Music. Address. What the Public Owes the Public Schools.

Music. English in the High School. Discussion. History in the Intermediate Grades. Discussion. History in the Grammai Grades. Discussion. History in the High School and Academy. Discussion. Question Box.

Music. Object and End of a College Course. Report of Committee on Geography. Discussion. Paper. How to Develop Individual Responsibility in Recitation. How Can We Secure Better Supervision? Paper. Drawing in Public Schools. Lecture. Nature Study. Business.

Music. Address. Rambles in Europe.

## PROGRAM.

Chorus. Prayer. Address of Welcome. President's Address. Literary Qualifications of the Teacher.

The Use of the Reading Book. Supplementary Reading. Longfellow and Whittier Studies. First Year English in High School. Modern Languages as Aids to English Study. General Discussion-High School English.

Reading in the Lower Grades. Aim of Reading in Primary Grades. New Words. How Learned. Reading Material. Language Work Based on Reading.

Chorus in Sight Reading. Nature Studies-Why. What and How. Drawng in Nature Work. Birds. Address.

## AN EXPERIMENT IN A NEW FIELD.

The rural school problem is occupying more of the attention of educators, at the present time, than any other subject connected with the education of the young. Teachers, superintendents and school officials are thinking, investigating, writing upon this question. It is conceded that the radical changes in the conditions which obtain in rural communities have made necessary equally radical changes in the administration of these schools.

The National Educational Association appointed a Committee of Twelve at its meeting in Denver in 1895, to make an exhaustive study of this subject. This committee consists of some of the leading educators of the country, and it is entering upon its work with a thoroughness and intelligence which indicate that the United States is to take a prominent part in the solution of this vitally important problem. It is expected that the committee will make its final report at the next meeting of the association.

The information which has been gained upon this subject in Maine has come largely from three sources. The State Superintendent has visited and personally inspected a large number of schools in different sections of the State. The superintendents of the several towns have been asked to give
detailed answers to questions covering the points to which the inspection was directed, and also to give replies upon several matters which it was not possible for any one else to investigate personally. The department has also gained much valuable information from private sources upon certain phases of this question that must contribute very largely to an intelligent knowledge of the conditions which prevail throughout the State, and must assist in no small measure in deciding upon the means that must be used to improve the rural schools.

The testimony at hand upon this matter is practically unanimous in favor of the position that the rural schools have not kept pace with the progress of the world, and have fallen far behind the standard attained by the schools in the larger villages and cities. The reasons for their inferiority must be discovered before any success can attend the efforts which are being made to improve them.

The best schools of Maine are of such a superior quality that those who are comnected with them can well afford to have the truth told concerning them. The State of Maine has done a quality of work in the educational field that enables her to announce the facts in regard to the condition of her school property, the scholastic and professional training of her school teachers, the methods used in giving instruction and the results attained in her schools without any fear of a loss of prestige by so doing.

Maine owes something, not only to herself, but to the world at large in the direction of improving her common schools. This work cannot be done unless her citizens, and particularly her school officials and teachers are willing to state what the truth is, to have these statements presented not only to her own people, but to the public, and then are willing to set themselves resolutely to the work of correcting the mistakes that are being made, and to strengthen her strong points. The work which has been done along the lines indicated above has borne good fruit. It is hoped that the
efforts which are to be made in the future will meet with equal success.

While the State Superintendent has been collecting information from the several sources stated above he has at the same time been making a careful study of the condition of about a hundred schools in a section of the State where the children and parents speak a foreign language, where but few of the parents can read or write, and where the children seldom hear an English word or see an English book in their homes. It is discovered from the assessors' books that these people are among what may be termed the least prosperous of the inhabitants of the State. They are as a rule unable to have many books, papers or magazines in their homes. They do not have sufficient means to build or furnish schoolhouses of the kind needed to maintain the best schools. The most of their teachers received their training in the schools which are supported in their own territory. The wages paid are not sufficient to make it possible for many of them to attend schools other than those which are within easy access.

The majority of the schools inspected are taught in schoolhouses which are wooden shells, without interior finish and are provided with long tables for desks and benches without backs for seats. The pupils enjoy but few of the advantages which come from associating with people who can help them in home study, aid them in their use of English, or direct them in their school work. The most of the bomes count for but little in the facilities they furnish, the influence they exert and the material they supply in supplementing the regular work of the school.

This section of the State was selected because it furnishes the most unfavorable intellectual and financial conditions of any equal number of communities in the State. If such interest can be developed and such work can be done as will show that superior schools can be maintained in these communities, then all arguments that superior schools can not be maintained in all parts of the State will fall to the ground.

The State Superintendent has not only visited these schools, inspected the work done, but has furnished the teachers with carefully prepared statements as to what subjects shall be taught, and has given suggestions as to the methods to be used in teaching the same. He has requested the teachers to make a careful study of the Course of Study prepared for the elementary schools of the State, and to make such use of it in their schools as will, in a reasonable time, make it a record of the work done.

He has directed the teachers to give instruction in music, drawing, physical culture, current events, the geography and history of the town, county, state and nation, sketches of noted men and women in Maine, New England and the Uvited States; to commit to memory selections from standard authors, and to give quotations from choice passages in our literature. He has also expressed not only a willingness, but a desire to have the children taught to rad, write and speak their native tongue, but he has insisted that the regular work of the school, including the discipline and instruction, shall be given in English. It is but just to state that the majority of the school officials and teachers, together with the parents, have heartily seconded the efforts which have been made to improve these schools. The circulars which have been sent to the teachers and school officials have been read from the pulpits of the churches, translated into the language which the people understand, and the influence of the spiritual advisers of the people has been thrown heartily and influentially in favor of an honest compliance with the requests that have been made and the instructions that have been given.

The change which has taken place in these schools is hardly less than a revolution. If the improvement continues for another year, the department will be able to place before the people of the State of Maine, in a graphic form, such a record as will show that it is possible to have our rural schools in charge of skillful teachers, who give instruction in the sub-
jects which should be taught in the schools of to-day, and use the methods approved by the best thinkers on educational subjects.

It is the principal duty of this department to strive to improve the condition of the common schools. After a careful study of the whole matter, it was decided that this could not be done with any considerable success unless the people of the State of Maine were made aware of what the schools are. It has been the work of this department for two years to present to the people of the State such facts as would enable them to form intelligent opinions as to their condition. This work having been done, the labors of the department in the future will be directed to furnishing such suggestions, outlines, helps and other material as will assist the citizens of the State to have a general interest in the schools and aid them in contributing to their welfare in ways which will occur to any one who desires to do something to help school officials, teachers and pupils to better ideas of what their work is and how it is to be performed. This is a large field, and a great work; but it is believed that something may be done to make the instruction more intelligent in its form, more useful in its method. and more desirable in its results. To this task, the department purposes to devote its efforts in the future.

The experiment which has been tried in this new field has been so much more successful than was anticipated that it has given courage to extend the scope of the departure.

## SOME THOUGHTS BY THE WAY.

The best teachers are trained in the kindergarten of observation, the high school of study, the college of investigation, and the university of experience.

Some teachers are visionary ; not a few have visions; and an increasing number are coming into the list of those who have vision.

We read of an age when it was the work of the scholar to study books. We are enduring the horrors incident to a furor about the study of things. A few have faith to believe that we are approaching the era when we shall exalt the study of life to its deserved commanding place.

Experience and a larger wisdom have reversed ninety-five per cent of the decisions of reason, and confirmed an equal proportion of the prophecies of the poets. Pope, Emerson, Balfour and Kidd unite in exposing the comparative valuelessness of reason as a guide in certain vital relations, and demonstrate the superiority of intuition in discovering ourselves, revealing others, and making the most of the best in both.

It is profoundly to be regretted that the most of the effort in the school of to-day is wasted in appealing to the senses, or the training of this quintette of modern deities. How to develop and utilize these local reporters is the burning question with most teachers. The invisible is not seen. Its existance is often denied, and its champion is scoffed off the arena set apart for the self-appointed leaders of those who ask to be led.

Any one familiar with the typical school of to-day realizes in how few instances the fact is recognized that the subtle life that quivers on the canvas, breathes from the printed page, and pulsates in bird and flower and gem, is worth more than the beautiful colors, the glowing words and the gracious comeliness that embody it.

Is it talking in an unknown tongue to say that we must learn to communicate without using symbols, that we must hear when no sound vibrates the air? May we not help our companions to feel the truth of this fine saying of the prince of interpreters of nature? "The sympathy of nature is so responsive that the sun's brightness would fade, the winds would sigh humanely, the clouds drop tears, and the woods shed their leaves in midsummer and put on mourning, if any man should have a just cause for grief."

Let us forever abandon the idea that analyses, dissections, classifications and the memorizing of facts will reveal to the children the story, the lesson, or the life of nature. They must be helped to feel its pulse, hear its music, come in touch with its forms, be warmed by its breath, and respond to its call.

These are the things which kindle the fire that warms the heart and brain. To see a thing in its expression, relation, harmony and proportion is to see it to some purpose. That high priest of the sanctuary of beauty has well warned us ''not to lose an opportunity to see anything beautiful, for beauty is God's handwriting,-a wayside sacrament. Therefore welcome it in every fair face, every blue sky, every tinted flower, and thank Him for it who is the fountain of loveliness, and drink it in simply and earnestly. It is a charmed draught, a cup of blessing."

Facts we shall always have with us. It is a part of the duty of life to know and master them. But facts are means, not ends. One needs to know them so well that he is unconscious of his knowledge and their existence. It is what they suggest, make possible, inspire, that has value. We should not be beasts of burden, seeking to accumulate, and willing to bear the weight of infinite details that can be better housed in books than in heads.

If we can grow to feel that it is the spirit with which we work, the purpose that inspires us and the motive that holds us to our task, that limit not only the extent, but the value of our service, we have made possible a great blessing to our
selves and others. Then will we feel a just sympathy with all worthy effort, a true harmony with all life, a full recognition of all beauty, and a prompt hospitality for all revelation.

Observation makes it clear that we often hold things so close to our noses that we cannot see them. It is also true that sometimes we try to see so much that we fail to see anything.

Schoolroom instruction, as well as conceptions of life, needs perspective. We should realize that it is not a part of our work to gorge the children with facts, nurse them on logic, or give them such training as will produce sluggers.

The entomologist can narrow his soul by a too close study of a humbug ; and so can the linguist by a too long search for a Greek root. One can live, and live worthily, without knowing much about the structure, characteristics, or habitat of a bird. If he can see its grace, hear its melody, feel its charm, breathe its air, and appreciate its abandon, he has gained more than facts contain.

A fine perception of the fragrance, color, delicacy, and unwritten wisdom of the flower is worth more than a scientific knowledge of the seed from which it grew, and the minutest information of the stalk, branch and leaf which hold its life.

We must know the alphabets and formulæ of science. We must be able to make tabular statements, classify and analyze. But we may know and do all these things, and still be deaf and blind to the great lessons that life and nature teach.

It should give us pause when we remember that the school and the pupil take their color, their tone and atmosphere from the teacher. Hence he must be clean, kind, responsive, hospitable, broad-visioned, receptive, and large enough to be willing for others to be larger than he, strong enough to be gentle, and wise enough to be simple.

Teachers should not indicate by their systems of instruction that they feel that the results of thinking are of greater value than the power that has been gained in reaching conclusions. The cultivating of self control, concentration, endurance,
application, appreciation, insight, receptiveness, responsiveness, should be recognized as being on a higher educational plane than a knowledge of insignificant towns, unimportant dates and meaningless definitions.

The teacher must be a scholar, in the sense that history will tell her the path her children have come, and why the ages Lave made them what they are; her knowledge of science must be so familiar that she can count the pulse of nature ; her companions in art and literature must be those who have written the record of the world before it was lived, and have made their prophecies and longings a part of the progress of the race.

The teacher should not aspire to furnish brains for her pupils. She should not be willing or presume to do their thinking. Such things are an injury to both, without being of service to either.

Children, like other human beings, do the hest work when they have some verge, scope and choice. If their personality is respected, their judgment recognized, and their aptitudes considered, they are stimulated to do their best. If they know the principles which underlie the facts studied, and are left to work out the details under one who is quick to see, prompt to command, suggestive in suggestions, and can win more by request than she can compel by command, she will help the children to become increasingly skillful, and render their labors correspondingly helpful. But to accomplish all this, she must be more interested in growth than concerned about having her little conceits reduplicated.

One cannot retain his courage to work unless he see more year's into the future than the records tell him have passed. He must possess his soul, see whence life has come, whither it is going, and be content to add his contribution to aid in giving it breadth, depth and richness. He must see and help others to discern the music that has no vocal expression, the grace that finds no outward form, and the thought that seeks no words to give it utterance.

We stand in the rotunda of a golden age of great achievements. We owe it to the future, as to ourselves, to appreciate our inheritance, and to use the capacities that the travail of the world has given us.

The sun is shining upon a better day than any upon which it has set. It is to dawn upon better days than the one upon which it is shining.

## ACKNOWLEDGMENTS.

Through the courtesy of Messrs. Coombs, Wilkinson \& Gibbs, architects, Lewiston, Maine, the department is able to present some unusually valuable designs, plans and sketches tor school-buildings. It is hoped that the work done by this firm will be of great assistance to towns that are considering the question of erecting new school houses.

This department takes great pleasure in acknowledging its indebtedness to Hon. Charles R. Skinner, Superintendent of Public Instruction of the state of New York, for permission to use designs and plans for school-houses, numbered 1, 2, $3,4,5,6$ and 7 .

The Educational Department of the Empire State has done a work for its common schools, in assisting in providing better school accommodations, that has attracted the attention of the whole country, and it is being most intelligently carried forward by its present able and distinguished superintendent.

Plans numbered 1, were prepared by Wm. P. Applewood and E. A. Bowd, Lansing, Michigan.

Plans numbered 2, were prepared by John R. Church, Rochester, New York.

Plans numbered 3, were prepared by Clarence True, Yonkers, New York.

Plans numbered 4, were prepared by William P. Applewood and E. A. Bowd, Lansing, Michigan.

Plans numbered 5, were prepared by J. C. A. Heriot and Corliss McKenney, Albany, New York.

Plans numbered 6, were prepared by J. C. A. Heriot and Corliss McKenney, Albany, New York.

Plans numbered 7, were prepared by William P. Applewood and E. A. Bowd, Lansing, Michigan.

The department is also indebted to Dr. A. G. Young, Secretary of the Board of Health of Maine, for permission to use the floor plans given on the pages which follow the New York designs and plans. These sketches were prepared by Dr. Young after a very thorough study of the whole subject, and are of conspicuous merit. It is hoped that they will be carefully studied by all persons who are interested in the construction of school-buildings.

The thanks of the department are also due to the following named manufacturers of school furniture who have kindly furnished electrotypes of the desks selected by the department as being well suited for our schools.

Illustrations numbered 1, 2 and 3, were furnished by Bobrick School Furniture Co., Boston, Massachusetts.

Illustrations numbered 4 and 5 were furnished by Chandler Adjustable Chair and Desk Co., Boston, Massachusetts.

## RECOMMENDATIONS.

The facts presented in the preceding pages of this report call for the following recommendations:

First. That a State Board of Examiners be appointed whose duty it shall be to examine all applicants for positions as teachers in the public schools.

Second. That provision be made for authorizing towns to unite in the employment of a superintendent of schools according to a plan outlined in another section of this report.

Third. That the school laws be so amended that no member of the superintending school committee shall, while holding that office, be eligible for the position of superintendent of schools or as teacher of any school in the town in which he is a legal resident.

Fourth. That the legislature provide for the maintenance of a number of Summer Training Schools for teachers, which shall give instruction in methods, and the subjects to be taught in the common schools, and that the sessions of the same shall not be less than four weeks in any given school.

Fifth. That the compulsory school law be so amended as to include all children between the ages of 7 and 15 years, and provide that they shall attend school for, at least, twentyfour weeks in each year, and that the penalties for non-attendance be so changed as to accomplish the purpose desired.

Sixth. That the school laws be thoroughly revised for the purpose of supplying deficiencies, making clear obscurities, and making such verbal changes as will make them consistent in themselves and in harmony with present conditions.

## COMMON SCHOOLS.

In Appendix III of this report will be found tabulated statistics in which are set forth in detail the condition of the common schools in every city, town and plantation in the State, for the school year ending June 1, 1896, also the number and condition of the Free High Schools for the same time.

A comparison between the condition of the schools as a whole for the present year and for the year preceding may be found in the following

## COMPARATIVE SUMMARIES.

## I. Of Scholars and School Attendance.

$1895 . \quad 1896$.
Whole number of persons between ages of
4 and 21 in State . . . . . . . . . . . . . . . .
Increase. . . . . . . . . . . . 1,756
Whole number of different scholars attend-
ing school during year. ................... 135,5̃98 134,140
Decrease . . . . . . . . . . . 1,458
Average registered attendance per term for
year. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 114,802 114,584
Decrease ............. 218
Average daily attendance per term for year, $95,841 \quad 94,912$
Decrease .............. 929
II. Length of Schools.

Average length for year ................... $26 \mathrm{w} 3 \mathrm{~d} \quad 27 \mathrm{w} 1 \mathrm{~d}$
Decrease ............... 3 d
Aggregate number of weeks per year ..... 117,183 119,498
Increase . . . . . . . . . . . . 2,315
III. Teachers.


| Number of male teachers in fall and winter 1895. |  |  |
| :---: | :---: | :---: |
| Number of male teachers in fall and winter terms . . . . . . . . . . . . . . . . . . . | 1,055 | 979 |
| Decrease . . . . . . . . . . 76 |  |  |
| Number of female teachers in spring and |  |  |
| Increase . . . . . . . . . . . . 23 |  |  |
| Number of female teachers in fall and winter terms | 3,638 | 3,698 |
| Increase . . . . . . . . . . . . 60 |  |  |
| Number of different teachers employed during year. | 6,636 | 6,786 |
| Increase . . . . . . . . . . . . 150 |  |  |
| Number continued in same school during year | 2,300 | 2,262 |
| Decrease ............. 38 |  |  |
| Number who had had previous experience. . <br> Increase............... 60 | 5,725 | 5,785 |
| Number who were graduates of normal schools | 913 | 925 |

Increase ..... 12
Average wages of male teachers per month, excluding board ..... $\$ 35,11$ ..... $\$ 34.39$
Decrease ..... $\$ 0.72$
Average wages of female teachers per month, excluding board ..... $\$ 20.04$ ..... $\$ 22.44$
Increase ..... \$2.40
Average cost of teachers' board per week. . $\$ 2.13$ ..... $\$ 2.11$
Decrease ..... $\$ 0.02$
Amount paid for teachers' services and board and janitors' services ..... \$1,107,407 \$1,107,818
Increase ..... $\$ 411$
IV. Text-Books and School Appliances.
Amount expended for free text-books ..... $\$ 63,202$ ..... $\$ 76,549$
Increase ..... $\$ 13,347$
Number of ungraded schools furnished with globes ..... 730 ..... 796
Increase ..... 66
SUPERINTENDENT'S REPORT. ..... 187
Number furnished with wall maps ........ 1,708 1,626 Decrease .............. 82
Number furnished with charts ..... 1,655 ..... 1,651
Decrease ..... 4
V. Number and Character of Schools.
Whole number of schools ..... 4,386 ..... 4,391
Increase ..... 5
Whole number of graded schools ..... 1,060 ..... 1,094
Increase ..... 34
Whole number of ungraded schools ..... 3,326 ..... 3,297
Decrease ..... 29
Number of ungraded schools having classes in history ..... 2,633 ..... 2,772
Increase ..... 139
Number having classes in physiology ..... 2,481 ..... 2,523
Increase ..... 42
Number having classes in book-keeping ..... 1,503
Decrease ..... 129
Number having classes in nature studies ..... 622
Number having classes in civics ..... 496
Number having classes in other than studies required by law 1,005 ..... 1,049
Increase ..... 44
VI. Number and Condition of School-Houses.
Number of school-houses in State ..... 4,242 ..... 4,196
Decrease ..... 46
Number reported in good condition ..... 2,927 ..... 2,995
Increase ..... 68
Number built during year ..... 78 ..... 126
Increase ..... 48
Cost of same $\$ 150,187 \quad \$ 189,605$
Increase ..... \$39,418
Estimated value of all school property.... $\$ 3,677,715 \$ 3,738,506$Increase$\$ 60,791$
VII. School Superintendence.
Number of terms of school not visited as law requires ..... 496 ..... 404
Decrease ..... 92
Amount paid by towns for superintendence, ..... $\$ 57,472$ ..... $\$ 54,727$Decrease . . . . . . . . . . . $\$ 2,745$
VIII. Resources and Expenditures.
Amounts available from town treasuries ... $\$ 799,411 \$ 852,982$Increase . . . . . . . . . . . . $\$ 53,571$
Amounts available from State treasury .... \$516,698 \$515,742
Decrease ..... $\$ 956$
Amounts derived from local funds ..... $\$ 46,040 \quad \$ 49,482$
Increase ..... \$3,442
Total current resources ..... $\$ 1,362,149$ \$1,418,206
Increase ..... $\$ 56,057$
Total current expenditures ..... $\$ 1,264,870 \quad \$ 1,317,717$
Increase ..... \$52,847
Balance unexpended (net) ..... $\$ 97,279 \quad \$ 100,489$
Increase ..... \$3,210
Amounts expended for new school-houses.. \$150,187 \$189,605Increase . . . . . . . . . . . . $\$ 39,418$
Amounts expended for free text-books ..... \$63,202 ..... $\$ 76,549$
Increase ..... $\$ 13,347$
Amounts expended for local superintendence $\$ 57,472 \quad \$ 54,727$Decrease . . . . . . . . . . . . \$2,745
Total expenditures ..... $\$ 1,535,731$ \$1,638,598
Increase ..... \$102,867
Amounts of school money voted by towns. . $\$ 710,910 \quad \$ 757,163$Increase$\$ 46,253$
Excess above amount required by law (net) \$165,988 ..... $\$ 236,408$
Percentage of valuation assessed by towns
for support of common schools ..... $\$ 0.002$ 2-10 \$0.002 3-10
Increase ..... $\$ 0.000$ 1-10

## FREE HIGH SCHOOLS.

The annually increasing number of towns that avail themselves of the privileges granted by the Free High School Act shows that the means of obtaining a higher education afforded by this system are better appreciated each year.

The one point to be carefully guarded, and which it may require additional legislation to effect, is that towns may not obtain the State aid designed for high schools for the support of schools ranking low in grade even as common schools.

That there is danger of the bounty of the State being abused in this way is evident from the Free High School returns of some of the town superintendents.

The comparative statements here given indicate the number, condition, scope of instruction and fiscal standing of these schools.

## COMPARATIVE STATEMENTS.

## I. Number and Length.

Number of towns having free high schools, 262
Increase. . . . . . . . . . . . . 15
Number supported by towns............ 241 233
Increase................ . 8
Number supported by districts......... 21 14
Increase................ 7
Aggregate number of weeks........... 6,477 6,249
Increase................ 228
Number of schools having more than one
term................................... . 199 191

Increase................ 8
Average number of weeks per year to each school

24w 3d 25w 1d
Decrease . . . . . . . . . . . . 3 days

| II. Altendance. | 1896. | 1895. |
| :---: | :---: | :---: |
| Number of pupils registered. | 17,090 | 16,848 |
| Increase .............. 242 |  |  |
| Average attendance. | 13,133 | 12,891 |
| Increase ............ 242 |  |  |
| Number of common school teachers who |  |  |
| Decrease ............. 99 |  |  |
| III. Scope of Instruction. |  |  |
| Number of pupils in reading classes. | 9,015 | 8,873 |
| Increase ........... 142 |  |  |
| Number in arithmetic. | 8,555 | 8,594 |
| Decrease ............ 39 |  |  |
| Number in English grammar. | 6,592 | 6,467 |
| Increase ............. 125 |  |  |
| Number in geography | 4,839 | 4,743 |
| Increase ............. 96 |  |  |
| Number in United States history ....... $2,946 \quad 2,928$ |  |  |
| Increase ............ 18 |  |  |
| Number in natural sciences........... 4,334 4,064 |  |  |
| Increase ............. 270 |  |  |
| Number in higher mathematics........ $7,369 \quad 6,706$ |  |  |
| Increase ............. 663 |  |  |
| Number in book-keeping.............. 2,296 2,318 |  |  |
| Decrease............. 22 |  |  |
| Number in modern languages.......... 1,988 1,734 |  |  |
| Increase ............ 254 |  |  |
| Number in ancient languages .......... 4,518 4,424 |  | 4,424 |
| Increase ............ 94 |  |  |
| Fiscal. |  |  |
| Whole amount expended ............ \$191,004 \$180,779 |  |  |
| Increase . . . . . . . . . . $\$ 10,225$ |  |  |
| Amount paid by towns and districts.... \$145,876 \$136,688 |  |  |
| Increase $\ldots$. . . . . . . . . $\$ 9,188$ |  |  |
| Amount paid from State treasury...... \$45,128 \$44,091 |  |  |
| Increase . . . . . . . . . . . \$1,037 |  |  |

## NORMAL SCHOOLS.

The following tabulation exhibits the statistics of attendance in the State Normal Schools at Castine, Gorham, and Farmington for the year 1895-6.

COMPARATIVE SUMMARY.

| School. | Year Ending. |  |  |  | Largest Attendance. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Term. |
| Castine.. | June 6, 1895... | 87 | 23 | 112 | 124 | Winter. |
| Gorham | June $20,1895 .$. | 73 | 45 | 98 | 101 | Winter. |
| Farmington .... | May $29,1895 . .$. | 131 | 44 | 160 | 172 | Winter. |
| Totals. |  | 291 | 112 | 370 | 397 |  |
| Castine ......... | June 4, 1896... | 123 | 37 | 157 | 170 | W inter. |
| Gorham | June 21, 1896.. | 84 | 38 | 100 | 112 | Winter. |
| Farmington | June 11, 1896.. | 131 | 41 | 1.65 | 192 | Winter. |
| Totals |  | 338 | 116 | 422 | 474 |  |

In the following reports of the principals of the three Normal Schools and of the principal of the Madawaska Training School the attendance, condition and needs of these several institutions are made known in detail.

## REPORTS OF PRINCIPALS.

## State Normal School, Castine, Me., June 4, 1896.

To the Trustees of State Normal Schools:
Gentlemen-I respectfully submit my eighth annual report of this school.
attendance.
Number entering the school. ..... 123
Number attending fall term ..... 145
Number attending winter term ..... 170
Number attending spring term ..... 155
Total enrollment for the year ..... 470
Number graduating, regular course ..... 29
Number graduating, advanced course ..... 8

TEACHERS.
The teachers for the year have been Albert F. Richardson, A. M., Principal ; Assistants, Mary E. Hughes, Edward E. Philbrook, M. D., Nellie F. Harvey, Winnie Austin, Kate S. Russell, Frank K. Lane, in the Normal School; Mabel F. Simmons, in the Model Training School, and Annie M. Hart in the Grammar Department. The assistant teachers have been greatly interested in their work, and I am glad to be able to speak in hearty commendation of the efficiency of each.

## LIBRARY AND APPARATUS.

But few books have been added to the general library, and the condition of the apparatus is about the same as at my last report ; in fact it is about the same as it has been for fifteen or twenty years. The number of books in the text-book library has been necessarily increased on account of the larger number of pupils attending the school. We need more books of reference, and more and better apparatus.

NEEDS.
Besides books and apparatus this school needs a new and modern system of heating and ventilation, and either a new gymnasium, or a room finished and furnished in the present building for gymnastic purposes. I submit a plan for heating and ventilation, which would cost about $\$ 4,000$, and which is similar to that at Farmington. I feel sure the legislature would appropriate this amount if asked to do so.

## THE YEAR's WORK.

The success attending the establishment of an advanced course has been beyond our expectations; the smallest number of graduates attending the school at any time during the year, for the purpose of taking this course, has not been less than twelve.

The most cordial and friendly feeling exists between this and other schools in eastern Maine, and all have worked harmoniously for the advancement of the cause of education.

The pupils have been quiet and orderly, and ready to obey all rules and regulations, and during the year there has not been necessary so much of a punishment as public reproof.

The total enrollment (470) has been the largest in the history of the school.

I would recommend the following named pupils for diplomas:

## ADVANCED CLASS.

Emery D. Bickmore, Stockton Springs; Lucy A. Crawford, Alton ; Harry H. Richardson, Castine ; Grace L. Rivers, South Cushing ; Beulah D. Robinson, Castine ; Luetta Robinson, Castine: M. Ella Tay, West Corinth; Albert S. Veazie, Castine.

## REGULAR COURSE.

Mabel V. Bartlett, Waldo; Emily N. Billings, Gardiner ; Willma E. Bowden, South Penobscot; Edith E. Buck, Clinton ; Maria A. Bunker, Franklin ; Laura E. Crockett, Pros13
pect; Musa B. Dollard, Brooklin; Laura M. Dority, Sedgwick; Georgie E. Frohock, Lincolnville ; Abbie W. Fuller, Searsmont; Edith M. Gray, Cape Rozier; Lucy W. Jones, West Brooksville; Annie J. Kingsbury, Bradford; Bessie A. Knowlton, East Northport; Blanche N. Lassell, Bradford ; Louise M. Lanpher, Sebec ; Sarah Littlefield, Prospect; Mae E. Lovering, Blaine ; Ethel L. Maxfield, Sandy Point; Albert W. Mead, Natick, Mass; Mamie F. Miles, Newburg; Estelle M. Perry, North Castine ; Mary K. Peterson, Searsport ; E. Mabel Raftery, Watertown, Mass ; Lelia H. Smith, Jonesboro; Susie S. Stinchfield, Clinton; Nina E. Titus, East Union ; Madge L. Thompson, Center Montville ; Helen A. Wooster, Scuth Hancock.

I recommend the re-election of all the assistant teachers.
Respectfully yours,
ALBERT F. RICHARDSON.

$$
\left.\begin{array}{l}
\text { State Normal School, } \\
\text { Gorham, June 21, } 1896 .
\end{array}\right\}
$$

To the Trustees of State Normal Schools,
Gentlemen-In accordance with the custom, I respectfully submit the report of the Western Normal School for the school year ending June 21, 1896. Number of pupils entering during the year, 84 ; number of pupils graduating during the year, 38. Attendance by terms. Fall term, 87; winter term, 112; spring term, 102. Number of teachers in regular work of Normal School, 6 ; number of teachers in regular work of Practice School, 3. Special teacher, 1; (music.) Pupils in Practice School: primary, 56; lower grammar, 48; upper grammar, 72.

## LIBRARY AND APPARATUS.

Volumes in literature, in history, and many text and reference books have been added to the library. Addition made to the means for chemical work and experiments.

## teachers.

W. J. Corthell, Principal, Pedagogy and English Grammar; Walter E. Russell, Natural Science, Natural History, Civics; Viola M. White, Geography, Botany, Drawing; Mary S. Gage, Rhetoric and English Literature; Katherine Halliday, History and Latin ; Margaret S. Sturdivant, Mathematics; Charles K. Hinkley, music.

Jennie M. Colby, Critic Teacher, Upper Grammar, 1st quarter ; Rose C. Johnson, Critic Teacher, Upper Grammar, 3 quarters; Ella F. Johnson, Critic Teacher, Lower Grammar; Nellie S. Clondman, Critic Teacher, Primary and Kindergarten.

Geo. H. Williams, Janitor.
courses of study.
The adoption of the three years course by the permission of the trustees, has been of marked advantage to the school. Some thirty-two pupils have entered the extended course. I earnestly urge the extension of the course to four years for those who have had no classical training.

$$
\text { graduates, january } 17,1896 .
$$

Laura D. Boothby, Saco; Ina A. Dennett, Saco ; Frank L. Douglass, West Gorham ; Mary F. Harvill, Robbinston ; Myra Hibbard, Perry ; Ethel L. Libby, North Falmouth; Edith L. McIntosh, Vinal Haven ; Lavinia J. Nash, Windham Centre ; Grace E. Preble, Woolwich ; Laura E. Pulsiver, 90 Pleasant Street, Auburn ; M. Eleaner Varney, Skowhegan.

Graduated june $19,1896$.
Evelyn Agnew, Red Beach; Bird M. Albee, Cumberland Mills; Ida Baker, Ellsworth; Myra A. Bragdon, Cumberland Mills ; Hannah Clifford, Cornish ; Nellie B. Collins, 72 Pleasant Street, Portland; Mary G. Connolly, 86 Adams Street, Portland ; Nellie B. Fossett, Pemaquid; Wilhelmina
S. Frost, Ellsworth; Adelaide M. Goudy, West Bristol; Effie M. Harmon, Bridgton ; Arobine Hatch, Fairfield; Grace M. Irving, East Deering ; Alice M. Jameson, Westbrook; Lillian R. Kimball, Bethel ; Bertha L. Leach, West Rockport ; Florence L. Loring, Brunswick ; Sadie E. Miller, Durham ; Lestina S. Moody, Biddeford ; Helen M. Perkins, Oldtown; Melvena V. Parker, Warren; Lizzie H. Poland, Round Pond; Maud R. Pullen, Yarmouthville; Marietta Stanley, Mansett ; Georgie E. Thompson, Deering ; Mary A. Walker, Alfred ; Alice M. Wheeler, South Paris.

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NEEDS-IMPERATIVE AND PRESSING.
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1. An additional teacher in the normal school.
2. An additional teacher in the practice school.
3. Three hundred dollars yearly, for books and apparatus.
4. A steel ceiling in the assembly room.
5. Blackboards in rooms, 4, 5, 6, 7, 8 .
6. One hundred and fifty "writing chairs."
7. Four revolving book cases for reference books.
8. Room and tools for manual training.
9. Teacher of manual training,
10. Additional rooms for the practice schools,
11. Maps, pictures, statuettes, for the rooms.
12. The floors oiled.

We are required to do work equivalent to the work of normal schools in other states, and lack appliances for such work.

> Respectfully Submitted,
> W. J. CORTHELL.
State Normal School, Farmington, Me., June 11, i896.

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## To the Trustees of the State Normal School:

Gentlenen-I have the honor to submit this my thirteenth annual report.

The attendance for the year has been as follows:
Number entering. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 131
Number attending first term. . . . . . . . . . . . . . . . . . . . . . 139
Number attending second term . . . . . . . . . . . . . . . . . . . 192
Number attending third term. . . . . . . . . . . . . . . . . . . . . . . . 164
Number different pupils for the year . . . . . . . . . . . . . . 281
Number graduating . . . . . . . . . . . . . . . . . . . . . . . . . . . . 41
The teachers for the year have been Geo. C. Purington, A. M., Principal; Assistants, Wilbert G. Mallet, A. B., Hortense M. Merrill, Harriet P. Young, Julia W. Swift, Melvin J. West, Nellie A. Skinner, Sadie M. Locke ; Assistants in Model Schools, Alice M. Varney, Madeline G. Clarke, Agnes E. Steward.

Having completed their work and 'maintained a worthy scholarship and commendable deportment" the following pupils are recommended for graduation from the Regular Course.

Lillian M. Andrews; Elias W. Blanchard ; Viola J. Brock; Robert A. Brown ; Edith B. Burdin ; Nora Butterfield ; Edith V. Corliss; Frances E. Donovan ; Patia M. Emery ; Eva B. Fairbrother; Minnie B. Farrington; Harriet J. Foster; Phila. N. Greene ; Clifford D. Holley ; Augusta A. Jackson ; Isa L. Jackson ; Marion E. Leland ; Alice M. Lilly ; Martha B. May ; John S. Millikin; Frank W. Moody ; Cora L. Moran ; May H. Nichols; Joseph A. Nile ; Dilla M. Noble; Hepsie C. Parsons; Winifred Pettengill.

Owing to lack of room and probable interruptions incident to the construction of the new building, those who desired to take the advanced course were influenced to postpone it till the coming year, consequently we have no class to graduate from that course this year.

Through the patience and care of my assistants I am glad to say that the discomforts and annoyance pertaining to the erection of a new building connected with the one in which we taught have been minimized, and I feel that the school has met with very little loss from those causes. The work of the year has been characterized by the same faithfulness and earnestness on the part of the teachers that have always marked their work. I have never had a year in which the conduct of the pupils was more commendable or their loyalty more marked.

The new building when completed will give us the much needed room, and, I believe, will prove large enough for the future growth and needs of the school. It would be difficult to find a building where so much has been secured for the cost.

We still need, as I stated last year, large additions to our apparatus, and library. It does seem that if the legislature could be made to see the importance of a better equipment in these directions that there ought to be no trouble in securing a reasonable appropriation.

I also again most earnestly urge a strong effort to secure an increased appropriation for the running expenses of the school.

I have the honor to be,
Very respectfully yours, GEORGE C. PURINGTON.

To the Honorable Trustees of the Normal Schools.
Gevtlemen:-The following is a report of the above named school for the year ending April 23, 1896.

## ATTENDANCE.

The attendance has been larger than that of any year since the founding of the school eighteen years ago.

The number attending fall term, 97 ; the winter and spring terms, 108; the number of different pupils for the year, 117; an increase of 30 over last year's attendance. The number graduating, 18 ; eight ladies and ten gentlemen.

## NAMES OF GRADUATING CLASS-1896.

Raymond P. Albert, teacher, Madawaska; Marie B. Cyr, teacher, Madawaska ; Caroline Dionne, teacher, Madawaska; Lizzie J. Freeman, teacher, Wallagrass; Germain H. Dionne, teacher, Madawaska ; Denis B. Martin, teacher, Eagle Lake; Archile M. Michaud, teacher, Fort Kent; Philomèn Michaud, teacher, Wallagrass; Joseph C. Morin, teacher, Fort Kent; Meddie L. Pelletier, teacher, St. Francis; 'Ozité P. Pelletier, teacher, St. Francis; Arthur P. Pinette, teacher, Fort Kent; Jennie Pratt, teacher, Fort Kent; Flora B. Robbins, teacher, Allagash; Omar J. Robbins, harness maker, Fort Kent; Nelson D. Sinclair, farmer, St. Francis; Henry W. Therriault, farmer, Fort Kent; Remi Thibodeau, teacher, Grand Isle.

## TEACHERS.

The teachers were, Vetal Cyr, principal, and Miss Mary Nowland, assistant, with Miss Sophia Pinette, a graduate of the school, in charge of the preparatory classes. Her work was satisfactory. I would recommend, however, that a teacher, trained in an older normal school be placed in charge of that department.

## LIBRARY.

I have called the attention of the trustees to the needs of the small library, for the last fifteen years, yet no action on their part to better its condition, is taken. If it be within the range of possibility to add a few good books of reference, with some biographical and literary works, it would afford the teachers and pupils a great source of information and pleasure.

## SPECIAL NEEDS.

With the last appropriation made, an additional story was built upon the original part of the schoolhouse, affording an opportunity to enlarge the hall, and build a large stage with convenient ante rooms. These are all finished and, like the buildings themselves, are an ornament to the State in this section, yet, we need something more to make these buildings complete and to afford to the young people who are being educated here the greatest possible advantages.

## GENERAL FACTS.

The pupils have been especially quiet and studious, and ready to obey all the rules of the school.

The large increase in the attendance of young men from year to year, and the number graduating, give me cause to believe more firmly than ever that the results of this school are paying the State a high rate of interest on all the money invested here, and when these young people become the active citizens in this part of the State, that interest will become compounded.

> Most respectfully submitted, VETAL CYR.

## FISCAL STATEMENT.

The resources and expenditures for the Normal and Training Schools for the fiscal year 1896, consist of the regular annual and the special appropriations and expenditures.

These appropriations, with the several items of expenditure, are tabulated in the following

## FISCAL SUMMARIES. <br> resources, 1896.

Annual appropriation for Normal Schools.... $\$ 27,00000$
Special appropriation for school-building at Farmington 10,000 00
Special appropriation for dormitory at Gorham 7,500 00

Total resources
$\$ 44,50000$
expenditures, 1896.
For salaries .................................... . . $\$ 25,030$. 00
fuel ........................................ 1,35453
general repairs............................. . 46827
diplomas, appliances, etc ................ 14720
school-building at Farmington........... $10,000 \quad 00$
dormitory at Gorham . .................. . 7,50000
$\$ 44,500 \quad 00$

## RECOMMENDATIONS OF TRUSTEES.

The Trustees of the State Normal Schools recommend a considerable increase in the appropriation for the running expenses of the normal and training schools of the State; also a liberal appropriation for completing and furnishing the dormitory at Gorham, completing the school-building at Farmington, making needed changes and repairs at Castine, enlarging the lot and making necessary repairs at Fort Kent.

## APPENDIX---I.

## APPENDIX-I.

## COURSE OF STUDY FOR RURAL AND VILLAGE ELEMENTARY SCHOOLS.

For a long time it was a mooted question whether it would be possible to prepare a course of study which could be used with profit in rural schools. This controversy has been decided in the affirmative by the success with which the courses of study prepared for the cities have been used in their rural schools. Experience has made it clear that it is as easy to grade a rural as a city school. The only danger lies in making the divisions too numerous, and attempting too much in the way of details.

An outline course of study. in which is stated simply and plainly the subjects to be taught, the order in which they are to be taken, the topics to be studied in each subject at a given time, cannot be otherwise than helpful to all who are connected with the school, since it furnishes a place at which to begin and sets a goal for which both teacher and pupil are to strive. It assists the teacher to form ideas of what should be done, when it should be done and how it should be done. It helps to develop the feeling that the pupils are held accountable for accomplishing a certain amount of work within a specified time; and this responsibility gives zest to whatever is undertaken and develops a spirit of enterprise which will lead to the mastery of tasks that are assigned. Such an outline in the hands of the teacher, with some suggestions as to the methods to be used, will give definiteness and symmetry to the work, and help to produce better results. If these directions are followed with reasonable faithfulness, the course must be of great service to the children.

It is not expected that this Course of Study will be followed literally, at first, in any school ; but it is hoped that superintendents and teachers will make it the basis of the work done. It is suggested that teachers begin, at once, to arrange their classes in five grades. It will be readily seen that the course is based upon the five readers used in most schools, one reader being assigned to each grade, the other work being so divided as to harmonize with this grouping of the studies. While it may not be desirable to limit the children, for the present, to the topics found in any given grade, it is best to commence immediately to work toward that end. If they are in advance in some branches and behind in others, give less attention to those in which they are specially proficient and more to the subjects in which they are lacking. By this plan of increasing the pressure in certain lines and devoting a little less time to other matters, our rural schools will, in a short time, be as well graded as are those in the cities.

The tendency in country schools is to allow children to devote the most of their time to one or two studies. Such a method of work must result in a one-sided development. One child is fond of geography, another of arithmetic, another of history and another of language. This fondness on the part of pupils is allowed to give direction and color to all their school work. While it is true that in the higher schools it may be safe to allow students some latitude in selecting their studies, it is not true that in the lower grades this permission should be granted. Children should be trained to read in such a way as to extract the pith from what is read and then be able to communicate it to others; they should have such a mastery of arithmetic as will enable them to use its principles and formulæ with intelligence, promptness and accuracy; they should be able to use their mother tongue with vigor and facility ; they should know the important facts connected with the geography and history of their own town, state and country; they should be able to write a legible hand, and should receive such training as will enable them to conduct themselves creditably in all the conventional relations of life. They should also receive such instruction as will help them to enjoy the beauties of literature, see the wonders of nature and appreciate the personality of the men and women who have made the progress of the world possible. In a word they should do such studying, receive such instruction, and have such drill as will
enable them to acquit themselves with credit in the social and business relations of life. A mastery of all the subjects required by the best common school course of study indicates the minimum work that should be done by the boys and girls of a community that believes in rearing self-respecting citizens.

This course will not be of service to the schools of Maine unless it receive the cordial and active support of the superintendents and teachers of the State. It will be necessary for them to study it in order to understand it; and more than all they must know it well enough to adapt it intelligently to the needs of their particular schools. If these things are done there can be no question but that within five years all the schools of Maine will be doing substantially the same work along all the lines of study required by the statutes of the State. When this is accomplished a pupil who is transferred from one town to another may continue his studies without loss of time.

If this course will help to bring about a fraction of the changes that it makes possible, the results will be of inestimable benefit to the children of the State. For this reason it is hoped that all concerned in this matter will give to it that attention and support which will insure its largest success.

It will be noticed that the titles of a large number of books have been printed in connection with each grade. This has been done with the hope that the teachers in the several grades may find in these lists some books that will be of special service to them and their pupils. It is suggested that the teachers make a careful examination of these lists, select the books which they think will be most useful and write the publishers for copies, asking the privilege of returning them if they are not found to be suitable for the purposes required. In most cases local dealers will furnish books at substantially the same prices as are demanded by publishers.

Haring made her selection, the teacher must study the books carefully in order to be able to use them skilfully. Unless she is, or grows to be, a student she cannot help her pupils to become students. The perfunctory reading of books is of little value. The reader must be helped to see, feel and think, in order that his reading may yield the highest return.

The children will derive greater benefit from their regular work, and the teachers will find it greatly to their advantage, if both do
some reading outside the text-books. This reading must be along professional and general lines on the part of the teacher, and on a variety of subjects on the part of children. For these reasons, the best known books in the various departments have been included in these lists.

It is not expected that any one school will be able to provide itself with more than a small number of the books given in the several lists, but it is believed that those books will prove most helpful that are selected and studied by the teacher.

This course is arranged on the basis of allowing about two years for the work outlined for each grade.

## FIRST GRADE.

First and Second Years.
Reading.-List of words prepared by teacher, Primer and First Reader.

Supplementary Reading.-Nature Readers Nos. 1 and 2, Julia McN. Wright; Nature Stories for Young Readers, Bass; Stories of Leaves and Plants, Spear; Child Life in Poetry, Whittier; Fables and Folk Stories, Scudder; Asop's Fables No. 2, Pratt; Stories for Young Children, Turner; All the Year Round, Strong;

Spelling.-Words selected by teacher from text-books used, and from other sources.

Penmanship.-Small and capital letters; words and sentences selected by the teacher and Tracing Book No. 1.

Language. -Teach the use of "a" and "an," nouns to denote one or more than one, correct form of verbs with singular and plural nouns, "this" and "that" with plural forms and such descriptive adjectives as can be understood. Simple homonyms and synonyms should be taught. Oral reproduction of stories and lessons given by the teacher should be begun. Have the children copy short paragraphs from their readers to accustom them to correct spelling, punctuation and capitalization. The use of capitals for proper nouns and at the beginning of sentences may be taught together with the use of the period and interrogation point. The words "I" and "O" should be learued and common abbreviations such as Mr., Mrs., St., etc. Devote a few minutes daily to dictation exercises.

Arithmetic.-Combinations in addition, subtraction, multiplication and division as far as 30 , and tables to include the 3 's ; writing and reading of numbers to include 300 ; Roman numerals to include 50. Teach the fractions 1-2, 1-3, 1-4, also pint, quart, cent, dime and days in the week. In slate work the sum, minuend, product or dividend is not to exceed 200. Drill to obtain rapid work in combinations. Devote one-fourth of the time to written and threefourths to oral practice.

Miscellaneous.-For outlines of work in Music, Nature Studies, Drawing, Physical Culture, Physiology and Hygiene, Morals and Manners, Preliminary Work in United States History, Civics and General Exercises see "Suggestions and Outlines."

## SECOND GRADE.

Third and Fourth Years.
Reading.-Complete Second Reader.
Supplementary Reading.-Nature Readers, Nos. 3 and 4, Julia McN. Wright; Little Flower People, Hale; Aunt Martha's Corner Cupboard, Kirby; Home Geography, Long; Brooks and Brook Basins, Frye; Fairy Tales, Grimm; Wonder Book, Hawthorne; Children's Hour, Hiawatha, (last half,) Hiawatha's Fishing and Sailing, From My Arm Chair, To the Children of Cambridge, Longfellow; My Saturday Bird Class, Margaret Miller; Stories Mother Nature Told Her Children, Andrews; The Brook, Tennyson; Stories of Great Americans for Little Americans, Eggleston; Fifty Famous Stories Retold, Baldwin; All the Year Round, Strong ; Five Cent Classics for Young People.

Spelling.-Words selected by teacher and words from textbooks used.
Penmanship.-Tracing Book No. 2 and Copy Book No. 1, and words and sentences selected by the teacher.

Langlage.-Teach nominative form of personal pronouns after "'is" and "was;" use and spelling of possessive singular of nouns. Continue instruction in synonyms and homonyms. Devote a few minutes each day to pronunciation, adding a few new words as fast as they can be learned. The correct use of familiar adverbs should be taught and common errors in spoken language corrected. Begin written reproduction of stories and simple exercises in letter writing. Pupil should learn to write his name, postoffice address and the days of the week. For practice in the correct use of irregular verbs see Bright's Graded Instruction in English. Review work of preceding grade.

Arithmetic.-Combinations in addition, subtraction, multiplication and division as far as 150 , and tables to include the 12 's ; writing and reading of numbers to include three periods; Roman numerals to include 1,000 . Teach seconds, minutes, hours in a day, months in a year, inches in a foot and feet in a yard. Complete primary book through division; simple analysis; drill to obtain rapid work in combinations, particularly in addition. Devote one-third of the time to written, and two-thirds to oral practice.

Miscellaneocs.-Same as in preceding grade.

## THIRD GRADE.

## Fifth and Sixth Years.

Reading.-Complete Third Reader.
Supplementary Reading.--Seven Little Sisters, Each and All, Andrews; First Book in American History, Eggleston; Young Folks' United States History, Higginson; New England Stories, Hawthorne; Our World Reader, Hall; Little Brothers of the Air, Miller; Parts of Snow Bound, Whittier; Stories and Pictures of Animals, Mrs. Tenney ; Great Stone Face, Hawthorne; Stories of American History, The Fairy Land of Flowers, Pratt; Old Greek Stories, Old Stories of the East, Baldwin; All the Year Round, Strong ; Five Cent Classics for Young People.

Spelling.-Words selected by teacher and first third of spelling book.

Penmanship.-Copy Books Nos. 2 and 3, and simple conventional and business forms.

Language.-Teach common, proper, singular, plural and possessive nouns. Increase number of irregular verbs learned. Introduce relatives "who" and "which" into this grade, teach when to use them and their inflected forms. Quotation marks should be taught. Dictation exercises should be given daily.

Some rules for the use of capitals and the formation of the plural of nouns should be taught. Continue drill in synonyms, homonyms and pronunciation. Add to the list of abbreviations already learned. Increase the written work in this grade and add to the reproduction of stories the description of pictures and stories told by them. Teach pupils to recognize subject and predicate. Complete primary book. Review the work of preceding grades.

Arithmetic.-Greatest common divisor, least common multiple, common and decimal fractions, and percentage, using primary book. Give review exercises of one or more of the fundamental rules daily to secure accuracy and rapidity. Require an intelligent analysis of problems solved. Continue this work throughout the Course. Devote two-thirds of the time to written, and one-third to oral practice.

Geography.-School building and yard, town, county and State; complete and review primary geography. See "Geography Topics."

History.-Short sketches of some of the "Leaders," selected by the teacher from "History Topics," using the outline given under topic, "Sketches of ."

Miscellaneous.-Same as in preceding grades.

## FOURTH GRADE.

## Seventh and Eighth Years.

Reading.-Complete Fourth Reader.
Supplementary Reading.-Stories of Our Continent, Shaler; War of Independence, Fiske; A man without a Country, Hale; Wake Robin, Burroughs; Maine Woods, Thoreau; Autobiography of Benjamin Franklin; Evangeline, Longfellow ; Lady of the Lake, Scott; The Story of Greece, Guerber; Grandfather's Chair, Hawthorne ; Black Beauty, Sewall ; Lars, Bayard Taylor ; Washington, Scudder; New England Girlhood, Larcom; Java the Pearl of the East, Hutchinson; Five Cent Classics; Historic Boys, Brooks; Ten Boys who Lived on the Road from Long Ago till Now, Andrews; In the Boyhood of Lincoln ; Being a Boy, Warner; Snow Bound, Whittier ; Fairyland of Science, Buckley.

Spelling.-Words selected by teacher and second third of spellingbook.

Penmanship.-Copy Books Nos. 4 and 5 and conventional and business forms.

Language.-Extend the work in synonyms, homonyms and abbreviations. Teach the use of the dictionary for pronunciation and definitions of words. Give advanced work in composition and letter writing so that pupils may be able to write a business or a friendly letter in correct form. Learn definitions of all the parts of speech with the parsing of nouns, pronouns and adjectives and the analysis of simple sentences. Drill constantly on the use of adjectives. Try to so extend the vocabularies of the children that they will embrace more than "awful," "lovely," "nice," etc. Written exercises for composition should be given as often as twice a week and dictation lessons should be given frequently. In all instruction pay constant attention to the correction of common errors in conversation. Continue text-book used to conjugation of verbs. Review work of preceding grades.

Arithmetic.-Addition, subtraction, multiplication and division, factoring, greatest common divisor, least common multiple, common and decimal fractions, denominate numbers, longitute and time, and practical examples in plastering, papering, measurement of surfaces, solids, etc., using "Complete" book. Review some of the essential principles of preceding work daily. Devote twothirds of the time to written, and one-third to oral work.

Geography.-Complete and review large geography. Review and extend the work on the town, county, Maine and United States. See "Geography Topics."

History.-Same as third grade.
Miscellaneous.-Same as in preceding grades.

## FIFTH GRADE.

## Nintir and Tenth Years.

Reading.-Complete Fifth Reader.
Supplementary Reading.-Vision of Sir Launfal, Lowell; Gettysburg speech, Lincoln; Miles Standish, Longfellow ; Julius Cæsar, Shakespeare; Ivanhoe, Scott; Alhambra, Irving; Life of Lincoln, Holland; Tom Brown's School days, Hughes; Birds and Poets, Burroughs; From Log Cabin to White House, Thayer; Poor Boys Who Became Famous, Poor Girls who Became Famous, Bolton; Boys' King Arthur; Historical Readers, Nos. 1, 2 and 3, Philips; Ethics of Success, Thayer; Makers of Our Country, Ellis; Age of Fable, Bulfinch; Heroic Ballads, Montgomery ; Five Cent Classics.

Spelling.-Words selected by teacher and last third of spellingbook.

Penmanship.-Copy Books Nos. 6 and 7 and all conventional and business forms.

Language.-Teach all common business forms, the writing and answering of advertisements, notes of invitation, etc. Analyze simple, complex and compound sentences and parse all parts of speech. Commit to memory choice passages with reproduction of the same. Complete and review the text-book used, and devote as much time as possible to studying masterpieces of literature.

Mathematics.-Arithmetic. Complete and review book used, devoting the most of the time to practical topics. Devote twothirds of the time to written, and one-third to oral work.

Algebra and Geometry.-Teach the fundamental principles and simple processes, using an elementary text-book.

Physiology and Hygiene.-Under these subjects should be taken up the structure and functions of the body, giving special attention to questions of food, assimilation, growth and care of the body. Use an elementary text-book.

Geography.-Review during the last term of this grade essential principles and principal facts. See "Geography Topics."

History.-Complete and review the book used. Make a careful study of the "Leaders." See "History Topics."

Miscellaneous.-Same as in preceding grades.

# SUGGESTIONS AND OUTLINES. 

READING.
FIRST GRADE.
The chief objects in reading are to get the thought of the author and to experience the feelings which he portrays, and then be able to give such expression to those thoughts that the same feelings will be aroused in the listener. There is no infallible process for accomplishing these results. That method is best which recommends itself to the the teacher as being the one that she can use to the greatest advantage. The points here given are meant to be used only as suggestions which may be adapted to suit the various needs of the different schools. At least half the time given to reading each day should be spent in word study, in which the thought and attention of the child are concentrated upon the word itself, its form, sound and meaning, so that he may readily associate the three. To aid in securing this result the blackboard, slates, charts and cards should be freely used. Begin with one or two words and add to them slowly and review frequently. Introduce words learned into new and interesting sentences and stories. Do not allow a sentence to be read aloud until the pupil has become so familiar with the words that he can call them readily at sight and thoroughly comprehend their meaning. Insist on natural, conversational tones.

The teaching of phonetics should have for its object such training as will enable the child to recognize sounds and develop the organs of speech so that he may utter these sounds. This drill will be of great service to him in the pronunciation and spelling of new words.

After the first three months the primer and first reader may be used, and a few quotations and selections from standard poetry should be committed to memory. Some part of the time given to reading should be devoted to reading aloud by the teacher. Select nothing but the best, using great care in adapting it to the capacity of the children.

Have new words in the lesson written on the board and studied till pupils become familiar with them before attempting to read the
lesson. Use the blackboard freely. Accustom the children to look there for something new each day, and reward them with an interesting or attractive short story, a question, some bit of information or a quotation. Seek constantly to arouse an interest in the discovery of new words.

As the pupils advance spend more time on the thought expressed in the selection read. Question pupils about their lessons to be sure that they are getting something more than words. Let them tell in their own language the stories read, and try to instill into their minds the idea that reading aloud is simply telling another's thoughts in another's words. Allow pupils to read frequently without criticism, and encourage by judicious praise any effort to improve.

Do not drill on one exercise too long. When the words can be recognized and their meaning fairly understood, it will stimulate interest to go on to a new selection, returning frequently to former lessons for review and for practice in sight reading.

Strive constantly to secure natural tones. Avoid high, harsh tones, as well as a drawling, sing-song style. Too much attention can hardly be given to this feature of oral reading during the first years of school life, in order that incorrect habits may not follow the children through all succeeding years. Give careful attention to the position of the pupil while reading. Require him to stand erect and hold his book in the left hand.

Insist upon correct pronunciation. Drill frequently upon words often mispronounced, using them for review work in new sentences or stories.

Read some of the following poems to the children and have a few of them committed to memory. Copy some of the poems on the blackboard; read them to the children; talk to them about the thoughts expressed ; encourage them to express in their own words the ideas and feelings suggested to them by the poems and talks.

The Village Blacksmith, Longfellow ; Minnie and Winnie, Tennyson; May, Nora Perry; The Rock-a-By Lady, The Sugar-Plum Tree, Little Blue Pigeon, Eugene Field; The Wind Flower, Martha Burr Banks; Five Little Brothers, Ella Wheeler Wilcox; Things to Discover, Annie Hamilton Donnell; The Thanksgiving Tree, Harriet Prescott Spofford ; Buttercup, Poppy and Forget-meNot, Wynken, Blynken aud Nod, With Trumpet and Drum, The

Shut-Eye Train, Eugene Field; Seven Times One, Jean Ingelow; How it Happened, Mary Chase Thurlow; Easter Song, Laura Richards; Good Night and Good Morning, Lady Moon, Lord Houghton; Christmas Song, Margaret Bradford Morton; The Difficult Seed, St. Nicholas, 1894; The Song of the Corn Popper, Laura Richards; Bed Time, Susan Coolidge; Song of the Cricket, Grace Denio Litchfield ; Cause for Complaint, Josephine Pollard.

## SECOND GRADE.

Spend some time in sight reading from books of the first reader grade. Some silent reading should be done, and the pupils required to tell in their own words the story read. Begin with the thought of a single sentence, and advance as rapidly as the attainments of the children will permit.

Continue the practice of teaching selections from standard poets and authors, with a few complete poems. These may be copied into blank books for future use. Take nothing but the best. Children can appreciate Longfellow, Whittier and Lowell quite as readily as older pupils, if care be taken in the selection, and they become interested in the men themselves through talks or selections read aloud by the teacher.

Explain the use of quotation marks, capitals, the hyphen and apostrophe, also the contractions and abbreviations found in the lessons.

Continue the phonic drill and teach pupils to recognize and mark properly the long and short sounds of the vowels.

Special attention should be paid to distinct articulation and natural expression, so that the reading may be pleasing to the listener. This can be more readily secured if the teacher is herself a model, both in the tones used in reading aloud, and in her general conversation. Train children to discriminate between harsh, discordant sounds and those that are pleasant and harmonious.

Supplementary readers should be used to cultivate a taste for good reading as well as to aid in the instruction in nature studies and history.

The best resuits can never be obtained unless the pupils are interested and anxious to learn. This can only be accomplished by the enthusiastic teacher who is constantly bringing new methods and ideas to bear upon her work.

Read selections aloud from good authors to serve as models of good reading and good literature, and then refuse to receive from your pupils anything but the best they can do. Lifeless, indifferent reading should not be tolerated. Make sure that the meaning is understood, then insist upon an intelligent rendering of the text.

For directions for using the following list of works see suggestions given in the First Grade.

The Barefoot-boy, In School Days, and Red Riding Hood, Whittier ; A Mortifying Mistake, Anna M. Pratt; The May Queen, first part, Tennyson; Mark With-the-Net, Elizabeth Cavazza; Pitty-pat and Tippi-toe, Grandfather's Gift, Intry-Mintry, Eugene Field; My Shadow, Robert Louis Stevenson; A Legend of the North Land, Phoebe Cary; The Boy and the Brook, Rain in Summer, Longfellow ; The Common Question, The Poet and the Children, Whittier ; Easter Carol, Phillips Brooks.

THIRD GRADE.
Pupils should begin the intelligent use of the dictionary in this grade and should be helped to understand its value in finding new meanings for words and as an aid in pronunciation.

The pupil may enlarge his vocabulary by giving the substance of a selection read in which he substitutes as many of his own words as possible.

Synonyms may be taught in this way and the use of blank books, in which a list of such synonyms is kept, will be of value in review work and a help in spelling.

A considerable portion of the time in this grade should be devoted to sight reading and, for this purpose, magazines and papers may be used in addition to the regular supplementary readers.

All the exercises of the preceding grades should be continued.
Particular attention should be given to careful enunciation and pleasing modulation. Any hesitancy in speech, or the habit of omitting or slurring consonants should be corrected.

More time should be spent in memorizing choice selections. The pupils in this grade should begin to appreciate the matter read, while less time need be spent on the mechanical part of the work.

Make such selections from the following list as will be attractive and helpful to your pupils. Have them study critically the narra-
tive and thought contained in the selection used and then write out the salient points in their own language.

My Lost Youth, A Psalm of Life, The Old Clock on the Stairs, Paul Revere's Ride, Longfellow; The Pumpkin, Skipper Ireson's Ride, Barbara Frietchie, Whittier; Charge of the Light Brigade, The Lady of Shalot, Tennyson; Children, Charles Dickens; The Gladness of Nature, To a Fringed Gentian, The Yellow Violet, Bryant; The Dinkey Bird, The Fire Hang Bird's Nest, To A Little Brook, Cobbler and Stork, The Hawthorne Children, Eugene Field; My Window Ivy, Mary Mapes Dodge; Abou Ben Adhem, Leigh Hunt; The Dumb Soldiers, Robert Louis Stevenson; Landing of the Pilgrims, Mrs. Hemans; My Kingdom, Hymn, Louise M. Alcott; Judge Not, Adelaide Proctor; Shuffle, Shoon and Amber Locks, Eugene Field.

## FOURTH GRADE.

Increase the use of supplementary reading. Encourage the home reading of good books. It may stimulate an interest in outside study if the teacher occasionally read extracts from books which she would like to have her pupils read. Many children get their only incentive to study good literature from a teacher whose opinion they have learned to respect. More use should be made of the dictionary, and the lists of new words with their synonyms, antonyms and homonyms should be increased and used in original exercises.

Give only a few lessons for study in reading. The most of the time should be spent in getting something of the author's conception of his subject. Review the work of the preceding grade. Insist always upon a reasonable comprehension of the selection read.

Encourage pupils to tell in clear, concise language something they have read at home that has especially interested them.

Write on the board lists of books to be used in connection with history or elementary science, and devote an occasional period to the discussion of their merits.

## FIFTH GRADE.

Before pupils have reached this grade, the most of the mechanical part of learning to read should have been completed and the time can now be profitably used by the children in becoming familiar with standard authors and good literature.

The study of the poets may be taken up in this grade more extensively and systematically than has been possible in previous years and it is of the greatest importance that this part of the work be entered upon with thoughtful preparation. Do not choose a poem at random. Make it serve as an historical picture, an accompaniment to the study of Nature, or an appropriate setting for the advancing seasons, because of its beauty of thought and purity of diction. Get into the spirit of it yourself and take your pupils with you. Precede the study of the poem with enough of a talk about its author to create an interest in him. Tell something of his boyhood, the schools he attended, the work he did and even the clothes he wore ; his habits, peculiarities, tastes and home life; the influences that most affected him and his methods of work in later life. Let the pupils realize that authors are not an entirely different race of men and women from themselves.

If you have selected an historical poem, like Longfellow's Cumberland, or Paul Revere's Ride, it will increase the interest to give a brief historical introduction, portraying the times, the influences that were surrounding men and the great questions that were moving them and the results that came from all these causes. As far as possible, get this work from your pupils, but be so familiar with the subject yourself that you can direct and supplement their knowledge from your own fund of information.

The methods to be used in studying a poem should depend largely upon the character of the poem to be taught. In some instances, it will be necessary to take the poem first as a whole in order to get a clear conception of the story, in other cases the several stanzas may be considered without reference to the whole. Prose articles may be taken up in a similar manner; and, if rightly presented, will accomplish much in stimulating a love for good literature and right ideas of how to use it.

It is in this grade more than in any other that the literary instincts of the teacher manifest themselves. Unless she reads and loves to read the best in literature, she cannot inspire her pupils to do so. Special preparation for the reading lesson is imperative. All allusions in the matter read should be understood by the teacher, so that she may intelligently question the pupils, and correct misconceptions, and thus lead them to form the habit of thoughtful reading. One who has given much thought to this subject says, "The
teacher must possess culture as well as a knowledge of books; he must know literature from having felt its power in his own life and be able to communicate this to the children."

Much may be done to cultivate a love for the artistic in literature by often calling attention to choice thoughts or beautifully expressed ideas. Call upon pupils for their conception of striking passages. Encourage them to see pictures in poems, and with closed books paint word pictures for the class.

Continue the practice of memorizing beautiful quotations and writing short sketches of their authors. The habit thus formed will be of great value long after the school day experiences shall have been passed.

Do not allow pupils to be satisfied with understanding the author's words. Urge constantly the value of mastering the thought and of feeling the sentiments expressed or suggested.

While one great aim in reading is to acquire the ability to express readily the written thought in pleasant tones with natural expression, clear enunciation and correct pronunciation, the work has been but poorly done if a pupil leave school feeling that this is all. Unless he has acquired the habit of reading, and has learned to extract the pith of books read; unless his reading has taught him to realize how little he already knows, and furnishes him with an incentive to continue his reading and study after he leaves school, his training will profit him little.

## BOOKS FOR TEACHERS.

Sentence Method, Farnham ; Preparing to Read, Spear ; Literary Land Marks, Burt; How to Teach Reading, Hall; Literature in School, Scudder ; The Use of Shakespeare as a Text-Book, Hudson.

## LANGUAGE.

The object of all study in language should be to enable the children to speak and write correct English. Every lesson should be a lesson in language. Constant attention to errors of expression commonly used in the school-room and on the play ground may do much to correct in the rising generation the mistakes of the previous and less favored ones.

Something must be radically wrong when a child can attend school till he is fifteen years old, receiving instruction in language and grammar during every year of his school life, and yet go out into the world as ignorant of the simplest forms of good English as if he had never seen the inside of a schoolhouse.

Much depends on the enthusiasm of the teacher and her ability to inspire the pupils with a desire to use the best forms of speech. To secure this result the subject must be put before the children in such a manner as will awaken interest.

## FIRST GRADE.

No technical work should be done in this grade. The children should be encouraged to talk freely, then their attention may be called to the incorrect expressions used, for which correct ones should be substituted by the pupils. It rarely happens that no one in the class can give the correct form. Too much attention can hardly be given to this part of language study in the beginning. Improve every occasion to train the child's ear till the expressions, "I done it," "He hadn't ought to," etc., become as offensive to lim as they are to you.

Simple homonyns may be used in oral sentences and their meaning and orthography carefully studied.

The oral reproduction of stories read by the children or teacher, or the description of objects in the room may be made of value. These should also include lessons given on morals and manners, on plants and such work on the human body as has been taken.

The children may begin to copy short paragraphs or sentences from their readers, taking great care that the work be accurately done. Accept no sentences unless they are correctly written.

Give frequent lessons on the use of see and saw, come and came, sit and sat, did and done, was and were, till the pupils become accustomed to the correct forms. Do not discontinue this part of the instruction until you find that they choose the correct words instinctively.

As soon as possible begin dictation work and devote a few minutes each day to this exercise. It may include matter previously copied from the reader and short sentences from lessons in uature studies.

In this grade pupils may be taught to write the correct form for the heading of papers. Use the same form always and insist upon its correct use after it is thoroughly understood.

## SECOND GRADE.

Review briefly the topics of the preceding grade and continue exercises to train the ear of the child to distinguish between correct and incorrect forms of expression.

Continue the use of homonyms and synomyms in sentences. Review descriptive adjectives, explaining the use of comparative and superlative degrees.

A few minutes each day should be given to pronunciation, taking only a few new words at any one lesson. Lists of words may be written on the board, or on manilla paper, and should be frequently reviewed. In this way nearly all the words used in a year, about which there is any difficulty, may be so thoroughly mastered that they will never be forgotten.

The use of familiar adverbs such as slowly, guickly, neatly, etc., and the correct use of the words doesn't for don't, as for like, well for good, etc, should be carefully taught.

Pupils may begin the written reproduction of stories read aloud by the teacher or written on the board, as well as the oral lessous given by the teacher on plants, animals, morals, manners, etc. Some of these written stories should always be read aloud, and the pupils stimulated to more earnest endeavor by judicious praise for creditable renderings, and for careful correction of errors.

An exercise may be made interesting as well as helpful in the correct use of irregular verbs as outlined in Bright's Graded Instruction in English.

In all written exercises, careful and detailed instruction should be given on the following points: neatness, indenting, punctuation, paragraphing, capital letters and construction of sentences.

## THIRD GRADE.

Review the work done in preceding grades.
The relatives "who" and "which" may be introduced in this grade and the children taught to know when to use them; also when to use the objective of "who." Much valuable time may be saved in the higher grades if these points are carefully taught in the lower grades.

The use of quotation marks in direct quotations should be taught, and changes made from direct to indirect quotations; later the broken or divided quotation may be introduced.

Daily exercises in dictation will be found of great help in teaching the use of punctuation marks as well as the possessive form which is so often a stumbling-block to children.

Letter writing should be continued and a lesson in geography, or a sketch of the life of some noted man, may be made the basis of the letter.

Some preparatory instruction in the use of the dictionary may be begun by teaching vowels and consonants and the long and short sounds of vowels.

Review the homonyms and synonyms learned in preceding grades and increase the number taught, paying attention always to the orthography of the words.

The work in pronunciation should be continued, giving more attention to this topic each year. Spend some time on the correct pronunciation of such words as "can't you," "won't you," etc.

Add to the list of abbreviations already learned, selecting such as may be used by the children.

More time should be given to written exercises in this grade, and beside the reproduction of stories read, it may be well to write the story told by a picture which has been the subject of a conversation lesson. It will aid in strengthening the memory if the stories are sometimes written the day after thay have been related.

The pupils may begin to use and recognize the terms subject and predicate and to analyze simple sentences.

## FOURTH GRADE.

In every grade the work begun in homonyms, synonyms, pronunciation and abbreviations should be reviewed and extended so that no farther mention need be made of these items; they should be included in review work.

In connection with the work in pronunciation, the use of the dictionary should be further taught, new sounds of vowels learned, and pupils taught to find words readily and to determine their correct pronunciation as well as their definitions. It is worth much to be able to find words in the dictionary easily and quickly.

Compositions and letters should be written frequently so that during this year a child may be able to write and address a letter that shall not only be correct in form but of value as to the matter contained.

There should be written exercises as often as twice a week, including either the reproduction of a story, a lesson in geography or in history, or the reproduction of a poem, or some of the quotations learned.

Dictation work should be given frequently, calling special attention to plurals, possessives, quotation marks, etc.

Persistent attention should be paid to the correction of common errors in conversation.

The work in language can be used in connection with almost every other study, and the work in composition made to reproduce other lessons learned, thus serving to fix them in the minds of the pupils as well as to increase their ability to express their thoughts. In all work of this kind great stress should be laid upon neatness, correct spelling and the application of all rules learned thus far, while only the best efforts of which the child is capable should be accepted.

## FIFTH GRADE.

The work in analysis should include simple, complex and compound sentences, and as soon as pupils are familiar with the rules in grammar, the parsing may be confined to giving the construction, so that more time may be given to composition.

The instruction in reading and spelling is so closely associated with language study that much that is said on one topic applies equally to the others.

The committing to memory of choice passages and the study and reproduction of the same may be used to great advantage in connection with the reading lesson; while the attention given to the orthography of the words may form a spelling lesson.

There is perhaps no study in which there is so much need of review, of eternal vigilance and of persistent effort to counteract the outside influences which surround so many of the children as in the study of grammar. There must also be a continuity of purpose if anything is to be accomplished, so that each year shall hold and add to the result of preceding years. It should be one of the aims of the teacher to avoid non-essentials and to this end she must see more than the work required in any one grade.

Before completing this grade the entire text-book should be carefully reviewed, spending the most of the time on the subjects which the children find it difficult to understand. If the work in preceding grades has been faithfully and intelligently done, and to the course laid out has been added the brains and enthusiasm of the genuine teacher, the last year's study in language may include much beside the text-book.

While technical grammar is valuable and we must not ignore it, yet added to this department of language is a vast field which we cannot afford to neglect.

Pupils may profitably spend the last year in this grade in becoming familiar with good literature, in acquiring a clear and concise style of expression, in increasing and enriching their vocabularies, and in learning to use choice and vigorous English instead of the cheap imitation to which we so often listen.

In using the outline given below it is important that the teacher have all the terms accurately defined, and after the definition is given by the pupil, require him to give a sentence which conveys some information or expresses an idea of some merit as an illustration of the statement made. In too many cases the sentences given by pupils to illustrate principles are so trite as to be harmful to them in the direction of injuriously affecting their vocabularies or thoughtfulness. If the term "proper noun" is defined it is quite as essential that the pupil give a sentence containing a proper noun that says something, as that he give the correct definition. After having defined the term, he may say "I live in Troy." The sentence is correct and the proper noun has been used, but he has
said nothing that either conveys information of any value or an idea that is of any importance. If he had said, "Maine was admitted as a state in 1820 ," or "Portland was the birthplace of Longfellow," or "Whittier was the author of Snow Bound," he would have said something that was worth while.

When a pupil is giving the properties of words in parsing, it is an excellent idea to have each property of the word parsed, defined. For example, if he says "made" is a transitive verb, have him tell that it is transitive because it requires an object to complete its meaning ; if he says it is in the active voice, have him state that it is active because it represents the subject as acting ; if he says it is in the indicative mode. have him explain that it is indicative because it asserts a fact, and in this way have all the properties of the several parts of speech defined, until the children are thoroughly familiar with the ideas expressed by the terms used; so familiar that they know them without stopping to think what they are. If this work is thoroughly done they will soon be able to understand why one verb is transitive and another is intransitive, etc. When these definitions are once thoroughly mastered they may be omitted in the recitation, and the time thus saved should be devoted to other important features of the work.

It is hoped that the teachers will find the following "topics" helpful in reviews. If a certain number of topics are assigned for a review, and the children are held responsible for giving accurate definitions and original sentences illustrating them, the teacher will be able to decide as to how much of the work has been mastered by the children, and how much of it needs further attention.

## GRAMMAR TOPICS.

| English Grammar : $\left\{\begin{array}{l}\text { Orthography, } \\ \text { Etymology } \\ \text { Syntax, } \\ \text { Prosody }\end{array}\right.$ |
| :---: |
| Orthography: $\left\{\begin{array}{l}\text { Letters, } \\ \text { Syllables, } \\ \text { Spelling. }\end{array}\right.$ |
|  |
| $\text { Syllables: }\left\{\begin{array}{l} \text { Monosyllable } \\ \text { Dissyllable, } \\ \text { Trisyllable, } \\ \text { Polysyllable. } \end{array}\right.$ |
| Etymology : $\left\{\begin{array}{l}\text { Classification } \\ \text { and } \\ \text { Derivation of Words. }\end{array}\right.$ |




- Personal,

Pronouns: $\{$ Relative,
Interrogative.
Properties of Nouns and Pronouns: $\begin{cases}\text { Gender: }\left\{\begin{array}{l}\text { Masculine, } \\ \text { Feminine, } \\ \text { Feuter, } \\ \text { Common. }\end{array}\right. \\ \text { Number: }\left\{\begin{array}{l}\left\{\begin{array}{l}\text { First, } \\ \text { Second, } \\ \text { Third. }\end{array}\right. \\ \text { Singular, } \\ \text { Plural. }\end{array}\right. \\ \text { Case: }\left\{\begin{array}{l}\text { Nominative, } \\ \text { Possessive, } \\ \text { Objective. }\end{array}\right.\end{cases}$





Conjunctions: $\quad$ Subordinate
Prepositions.
Interjections.



BOOKS FOR TEACHERS.
Teacher's Edition Knox and Whitney's Language Lessons; Graded Instruction in English, Bright; Practical Language Book, Pratt ; How to Teach Language, Metcalf ; Our English, Hill; Suggestive Lessons in Language and Reading, Badlum; Treatise on Punctuation, Wilson ; Verbal Pitfalls, Bardeen ; History and Literature in Grammar Grades, Phillips.

## ARITHMETIC.

## FIRST GRADE.

Children will receive their first ideas of number by numbering objects ; and many simple and inexpensive articles may be used in illustrating lessons given, such as leaves, marbles, beans, pegs, blocks, etc. Since the abstract idea of number is extremely difficult for the child to comprehend, his attention may often be held by the use, beauty or novelty of objects. An important feature of the work of this grade is to teach number as related to objects, making constant application of it in numbering all things taught.

Pupils should learn to recognize numbers in groups and be able to count by ones, twos, threes, etc., also to form even and uneven groups from the whole group.

The names and uses of the signs,,$+- \times, \div,=$, should be taught and drilled upon till pupils are perfectly familiar with them.

Much time should be given to adding columns of figures. Pupils should be taught to divide an object into halves, thirds, and fourths and to combine them to form a whole again.

The one-cent and two-cents pieces, nickel and dime should be learned and some practice in their values may be given by means of toy money. The number of cents in a dime and dimes in a dollar should follow later in the grade.

Make the use of problems an important factor in all lessons in arithmetic. The work of this grade should be prepared with the greatest care, since it is here that the foundation for future success or failure is laid. For instance, it is as easy for the teacher to say, "If you earn three pennies to-day and four to-morrow, how many will you have?" as to say "Three and four are how many?" or "Ten cents will buy how many peaches at two cents apiece?" This requires the pupil to picture the situation and see in it the process necessary to be used.

Some work in simple denominate numbers may be accomplished, such as number of pints in a quart, days in a week, months in a year, units in a dozen, etc.

The exercises may be made interesting and helpful by the use of number stories which call for rapid mental work.

Pupils should be tanght to make the figures, and all work should be neatly and carefully done.

Before completing the work of this grade pupils should know perfectly, the following thirty-six combinations.


This diagram was taken from a carefully prepared course of study and will readily recommend itself to teachers.

## SECOND GRAUE.

Review first year's work rapidly. Columns of three figures should be added and much work done in rapid addition.

In subtraction the processes of borrowing and carrying should be carefully explained. The "tables" should be mastered.

Long division with a divisor of not more than two figures should be taught together with simple exercises in fractions. Review denominate numbers and extend the work, using objects to illustrate tables learned, whenever possible. A foot rule divided into inches, a yard stick, a quart and other measures may be easily found. Practice in making examples should be continued and mental work should be increased. Make problems simple and interesting, and with as little similarity as possible. Begin and close lessons with rapid mental work. Attempt but one difficulty at a time and be sure that your pupils master it. Some work in decimal notation should be done in this grade. Toothpicks or straws may me bundled by the pupil into tens and hundreds and held by small rubber bands. Analyze numbers, as in 53, how many units? 53 ; how many units beside the tens? 3 ; how many tens? 5. Exercises in fractions should be continued. $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}, \frac{1}{6}, \frac{1}{8}$ should be so taught that they can be used readily. Much attention should be paid to simple problems bearing on business principles.

In all number practice, accuracy, neatness and rapidity should be insisted on and in this as in other branches the teacher should refuse to receive anything but the best the pupil can do.

THIRD GRADE.
Review the work of preceding grades, both written and mental. Some time should be devoted daily to one or morefof the fundamental rules to secure accuracy and rapidity. Try to get an answer from every pupil, the dull as well as the alert.

All the processes in fractions and decimals, with greatest common divisor and least common multiple, should be included in this grade.

Some practice in problems requiring thought should be given, and simple but clear explanations and analyses should be required.

Additional tables should be learned andithose previously studied reviewed.

Examples in bills and simple interest may be given, and special attention throughout the entire course should be paid to illustrating the principles taught with such business transactions as are easily within the comprehension of the children.

## FOURTH GRADE.

Review fractions and decimals and take addition, substraction, multiplication and division of compound numbers.

Practical examples in plastering, papering and carpeting rooms may be given with others relating to the measurement of bins, boards, walls, areas and solids.

It will be of much value to the pupil to be able to prepare and solve original problems.

Some work in simple proportion should be done and under commercial arithmetic, work in bills, commission, profit and loss, simple and compound interest and commercial discount should be given.

More difficult work in mental problems and oral analysis should be required.

## MA'THEMATIICS.

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FIFTH GRADE.
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There should be a thorough and complete review in this grade of all the work done in previous grades.

Some time should be spent each day on the written or oral analysis of examples.

All the terms used in arithmetic should be accurately defined. These definitions should be illustrated by examples that are within the comprehension of the children until they know them so thoroughly that they have no question about how to apply or to use them. A definition is of no value unless it expresses a thought that is comprehended. It is better that the teacher err in doing too much rather than too little in this direction.

Take up ratio and proportion, simple and compound, insurance, partial payments and forms for business papers, general principles of single-entry book-keeping, with illustrations.

In addition to the study of arithmetic, some work in elementary algebra and geometry, should be done. See Report of Committee of Ten for topics, etc.

The following outline may be of service in reviews in arithmetic. If the topics are taken up in the order in which they are given, and the pupils are called upon to define the terms used and furnish original problems as illustrations of the definitions recited, the teacher will be able to discover in what particulars they are proficient and in what they are lacking.



BOOKS FOR TEACHERS.
Number and Form, Speer; Teachers' Edition of Primary Arithmetic, Reed; Grant's Arithmetic for Young Children, Small; Grube Method of Teaching Arithmetic, Seeley; Methods in Written Arithmetic, Cook; Number Stories, Woodward; Number Cards, Teachers' Card Companion, Winship; First Two Years with Number, White; First Four Years in Number, Bacon; Philosophy of Arithmetic, Brooks.

## GEOGRAPHY.

Before the third grade, no text-book is needed in geography; but there is perhaps no study in which a skilful teacher can do better work than in primary geography, since no other branch affords such a variety of subjects in which children delight. The secret of success in this study lies almost wholly in the preparation which the teacher makes for her work. She should learn every lesson thoroughly, even to the minutest detail, and have a definite purpose to accomplish every day. If she realizes the necessity for such preparation she will then be able to do those things which will ensure the results she desires. She should be able to enliven the recitation with interesting stories, and form mental pictures by means of vivid illustrations of the things taught. She should fix these mental pictures by logical association, comprehensive definitions and frequent reviews. She should be patient, realizing that education is a slow growth and that with children "sseeing is believing."

If the teacher has realized her opportunity and made use of it, pupils will enter upon the study of geography from the text-book with something akin to enthusiasm.

In this study omit all minor details as to physical features and political divisions. No time should be spent in learning the names or locations of small towns, capes, bays, islands, mountains, straits, lakes, etc., etc. Combine sections that present the same conditions, and treat together those parts of the earth of which the same statements are true. By means of maps, pictures and books of history and travel pupils should take journeys through the countries studied.

Master the salient facts relating to your own country even if you devote but little time to foreign lands.

The study of geography, if rightly pursued will develop the imagination, train the reason, cultivate the powers of expression, nurture the sentiment of patriotism and help to gather a fund of useful information.

## THIRD GRADE.

Begin with a diagram of the room. Teach the points of the compass, the location of objects in the building, in the yard and in the
town. Make a map of the school yard, and extend the work of map drawing until it includes the town, county, State and United States. Always omit details. Put upon a map only those things which you may reasonably expect the pupil to remember.

To illustrate the form, size and motions of the earth, use globes, maps and clay. Simple devices may be used to give the children adequate ideas of the hemispheres, divisions of land and water, climate and temperature. In all these outlines consider the important items only. Fix these firmly in the minds of the children, but do not load them with material which is of no value, but will serve simply to crowd from their minds the essential facts.

Teach much by comparison, using some well-known unit, as for instance in teaching areas, use Maine as the unit and compare it with England, France, Spain, the New England States, etc. Compare the United States with China, the German Empire, Russia, etc.

In the same way compare the length of rivers by having pupils draw to a convenient scale, the rivers side by side, on paper or the blackboard, using the Kennebec, perhaps, as the unit.

This comparison may be extended to the population and products of countries and the manners and customs of different peoples.

For detailed directions for studying Maine, groups of states, United States, North and South America, Europe, Asia, and Africa, see "Geography Topics."

Make a careful study of the government, natural resources, occupations, manners, customs and education of the people, and the cities of each country. Take journeys through the countries studied, giving special attention to routes and means of travel. Use such diagrams and objects as will give children clear ideas of direction and distance. Help the children to discover why cities are located where they are.

## FOURTH GRADE.

The same general plan may be used for all states and countries studied. In taking separate countries, study cities as centers of art, learning, commeree or manufactures. Also make a special study of cities of historic interest. The places of interest in the countries studied will furnish ample opportunities for work in supplementary reading and study. Encourage the children to bring in articles, pictures and bits of information bearing upon the subjects under consideration. Make scrap-books for reference and
study. Have these books include such material as will help the children to clear ideas of how the people live, in what industries they are engaged, the natural features of the country and the quality of their civilization. Have poems read and quotations learned that refer to places studied. Such practice will serve to fix important facts in the minds of the children as nothing else can.

Connect the history and geography lessons whenever possible. Have the children locate on maps, places mentioned in the newspapers in connection with important events. Encourage children to read books of travel and geographical descriptions.

The practice of writing compositions on the life, habits, manners, etc., of different peoples will do much to stimulate an interest in general reading and to make the work seem something more than memorizing dry and uninteresting facts. Make a special point of reading pictures that tell of the homes, occupations and advancement of the people studied.

Seek always to awaken interest and enthusiasm in your pupils by exhibiting those qualities yourself.

## GEOGRAPHY TOPICS.

1. School Building \(:\left\{\begin{array}{l}Diagram of roona, <br>
Points of compass, <br>
Location of objects in building, <br>
Location of building in yard, <br>
Location of bailding in town, <br>

Map of school yard.\end{array}\right\}\)| Map, |
| :--- |
| Size, |
| Divisions, |
| Soll, |
| Physical features, |
| State and United |
| Satural resources, |
| Industries, |
| Productions, |
| Population and people, |
| History, |
| For what noted, |
| Places of interest. |

Locate Town in County; County in State; State in United States, and United States in Continent. Take journeys through State and United States.
3. Earth:


## BOOKS FOR SUPPLEMENTARY WORK.

Boy Travelers, Knox; Down the Rhine, Up the Baltic, Optic; Due West, Ballon; Family Flights, E. E. Hale; All Aboard for Sunrise Lands, E. Rand; The Log Schoolhouse on the Columbia: Our Fatherland, Little People of Asia; When I was a Boy in China; The World by the Fireside, Kirby ; Children of the Cold, Sehwalka.

## BOOKS FOR TEACIERS.

Child and Nature, Frye; Methods and Aids in Geography, King ; Lessons in the New Geography, Trotter ; How to Study Geography, Parker; Geographical Illustrations, Davis; National Geographical Monographs.

## UNITED STATES HISTORY.

Before studying United States History from a text-book the subject should have been taken up incidentally in the supplementary reading, composition and language work, and in general exercises.

In studying history do not confine pupils to the words of the book, or to any one text-book. Seek to cultivate a desire on the part of the pupils to know more about a subject than is found in the prescribed book.

The topic method should be followed largely, and at the close of the study of a period, the class should be able to summarize the subject studied, dropping the unimportant details and bringing out and retaining the facts of vital importance.

History should not be studied merely as a record of isolated facts, but should be considered in all its relations and bearings upon life. Try to make the great men living characters and their achievements and failures actual occurrences. Emphasize the forces that build up nations and make them great. Teach the great foundation principles that have prevailed in the history of our nation and have determined our actions in great crises.

Make maps illustrating the routes of Columbus on his different voyages and trace the travels of the most important early discoverers and explorers. Connect events and localities. If an outline map cannot be obtained have one drawn on the blackboard with colored crayon.

The following named topics should be studied somewhat in detail:
The discovery and early exploration of America. Life of Columbus. Causes which led different nations to explore and settle this country. Character of settlers, and their home and community life. Difficulties with French and Indians. Conflicting claims of European nations and final struggle for supremacy. Colonization of America. Character of colonists. Contrast Puritan and Cavalier.

Find out how the colonists lived, what they ate, their dress, manners, occupations; their schools, places of worship, peculiar laws, etc.

Urge the children to extend their reading on the following topics :
The troubles with England and causes of the Revolution. The

Navigation Acts. Writs of Assistance. Stamp Act. Boston Port Bill. Continental Congresses. The leaders of the Revolution and their peculiar work and characteristics. The principal campaigns and decisive battles. The elements of strength and weakness. The results and consequences of the war. Condition of the people and country after the war. Growth and political changes, from 1775 to 1787 . The formation and adoption of the Constitution. Its supporters and opponents. Its influence in building our Nation.

Encourage the children to bring in pictures and sketches relating to the different periods and persons studied.

Make scrap-books in which all items shall be arranged in periods. Collect pictures illustrating the vessels in which the early explorers sailed, the costumes of the people and the implements used. Use this material as books of reference.

Have reading lessons occasionally, relating to some man whose life you are studying. Write sketches about him. Lead the children to talk about the causes that led to great results. Do not encourage a partisan spirit, but seek to inculcate a desire for fairness and justice in all decisions.

Review principal events often and refuse to admit any butimportant dates. Lead the pupils to see that the people make history, and group important results around the leaders. Do not spend much time on unimportant battles, but look for causes and results.

Cultivate in the children the habit of independent study and research by inspiring them to make a careful study of some of the following topics.

Condition of the country in 1789 . Washington's influence upon the Nation. Different political parties: Their principles. The leaders. Principal events and progress made in each administration. The Mexican War and War of 1812. The Civil War: The causes that led to it. The introduction of slavery. Missouri Compromise. Fugitive Slave Law. Nullification Acts. Dred Scott Decision. Omnibus Bill. Kansas-Nebraska Bill. Historic campaigus. Principal battles and their results. The commanders. The principal events of the war. Its duration and influence upon the people and the country. The Reconstruction Acts. The progress our country has made.

Do not teach history as if it were entirely a thing of the past. Let the children see that we are making history every day and that
the motives that inspire men to-day are the same as those which influenced people in the past.

Emphasize the influence of inventions and discoveries, as means of progress and development. Show the value of the cot-ton-gin, the steamboat, railroad, printing-press, telegraph, telephone, etc.; also call attention to the important crises of National History, as the Declaration of Independence, making the Constitution, the disputes over Nullification, Slavery, the Civil War, etc.

It is of the utmost importance that much work in biography should accompany the study of history in order to render it profitable. Only as children become interested in the lives of the men who have made our country, can they make history seem anything but a collection of dry and uninteresting facts.

Continue the work of map drawing to illustrate the accession of territory, the scenes of the wars and to fix important events in the minds of the pupils.

Study the geography of the country to discover the reason for its growth and development.

Study the early settlement, progress and present condition of our own State. Lead the pupil to become familiar with the deeds of the men of note in his own immerliate neighborhood.

Review important events and their results frequently.
If pupils leave this study with some knowledge of the history and grow th of their country and a desire to know more of the men who have been instrumental in its progress, the teacher may feel that her work has met with some measure of success.

In connection with the study of American History take up briefly an outline of the principal events in English History with short sketches of its leaders.

## HISTORY TOPICS.

Norse Explorations: $\left\{\begin{array}{l}\text { Where? } \\ \text { Extent. } \\ \text { Results. }\end{array}\right.$

Mound Builders: Where they lived.
\} What they did.
f Where found?
Number.
Personaj appearance. Intelligence.
Indians:


| English Colonies and Colonists: | By whom settled? |
| :---: | :---: |
|  | When? |
|  | Canse. |
|  | Permanent settlements. Govrruments. |
|  | Ocenpations. <br> Customes. |
|  | Inabits. |
|  | Ifomes. |
|  | Intelligence. |
|  | Chamater of people. |
|  | Lenters. |

Continental Congresses and their work. Population. Where:
Troubles with England.
Revolution: $\{$ Remote causes.
Direct causes.
Elements of strength. Weakness.
Leaters in colonies.
Objective points. Location.
When?
Campaigas of Revolution: \{ Forces. Commanders.

- Arvantacres. Difficulties.

Decinive battles.
( Results. Comsequences.
Formation.
2 Featares.
Confederation: 3 Defects.
4 Principal ovents.
Leaders.
Contition at close of war.
788-7: , New troubles. How met
Growth.
Political changes.
Constitution of United States: \(\left\{\begin{array}{l}Formation and adoption. <br>
Features. <br>
Objections. <br>
Amendments. <br>
Who favored <br>

Who opposed? Why?\end{array}\right\}\)| Presidential Administrations: |
| :--- |
| $\left\{\begin{array}{l}\text { Party. Its principles. } \\ \text { Term of office. } \\ \text { Principal events. } \\ \text { Progress made. } \\ \text { Leaders. }\end{array}\right.$ |

Schools.
Homes.
Intelligence.
People: $\left\{\begin{array}{l}\text { Characteristics. } \\ \text { Occupations }\end{array}\right.$
occupations.
In what excel.
Extent and character of progress made.
Rank and influence as a Nation.


## REVIEWS.

Colonies: $\left\{\begin{array}{l}\text { Territory explored by each nation. } \\ \text { Territory claimed by each nation. } \\ \text { Territory settled by each nation. } \\ \text { Territory lost or gained by each nation. } \\ \text { Territory claimed by eachin } 175 . \\ \text { Territory claimed by United States in } 1787 . \\ \text { Maps and charts indicating above data. } \\ \text { Manners and customs of colonists. } \\ \text { Industries. } \\ \text { Education. } \\ \text { Elements of strength. }\end{array}\right.$

Territory - When and how acquired. Population-Increase. Industries-Development. Resources-Kinds and value.
Jnited States: Inventions-Kinds and importance. Learning-Extent and character. Literature-Extent and quality. Leaders-W ork and influence. Maps and graphic charts indicating above data.

## LEADERS.

Discoverers:
Coiumbus.
Cabot.
Cartier.

Explorers:

| Colonizers: | $\left\{\begin{array}{l} \text { Raleigh. } \\ \text { John Smith. } \\ \text { Carver. } \\ \text { Winthrop. } \\ \text { Penn. } \end{array}\right.$ |
| :---: | :---: |
| Revolution: | $\left\{\begin{array}{l} \text { Washington. } \\ \text { S. Adams. } \\ \text { Henry. } \\ \text { Frankin. } \end{array}\right.$ |
| Forming Government: | $\left\{\begin{array}{l} \text { Washington. } \\ \text { Hamilton. } \\ \text { Jefferson. } \end{array}\right.$ |
| Development: | $\left\{\begin{array}{l} \text { Webster. } \\ \text { Clay } \\ \text { Cahoun. } \end{array}\right.$ |
| Defenders of Nation : | $\left\{\begin{array}{l} \text { lincoln. } \\ \text { Girant. } \\ \text { Douglas. } \end{array}\right.$ |
| Poets: | $\left\{\begin{array}{l} \text { Longfellow. } \\ \text { Whittier. } \\ \text { Lowell. } \\ \text { Bryant. } \end{array}\right.$ |
| Artists: | $\left\{\begin{array}{l} \text { Stuart. } \\ \text { West. } \end{array}\right.$ |
| Writers: | $\left\{\begin{array}{l} \text { Emerson. } \\ \text { Hawhorne. } \\ \text { Hrving. } \end{array}\right.$ |
| Historians: | $\left\{\begin{array}{l} \text { Motiey. } \\ \text { Bancroft. } \\ \text { Prescott. } \end{array}\right.$ |
| Inventors: | $\left\{\begin{array}{l} \text { Morse. } \\ \text { Fulton. } \\ \text { Edison- } \end{array}\right.$ |
| Scientists: | $\left\{\begin{array}{l} \text { Agassiz. } \\ \text { Franklin. } \\ \text { Audubon. } \end{array}\right.$ |
| Educators: | $\left\{\begin{array}{l} \text { Mamn. } \\ \text { Mopkins. } \\ \text { Barnard. } \end{array}\right.$ |
| Sketch of | $\left\{\begin{array}{l} \text { Ancestors. } \\ \text { Iome. } \\ \text { School life. } \\ \text { Prsitions held. } \\ \text { By whom or what influenced. } \\ \text { Work. } \\ \text { Methols of work. } \\ \text { Trits. } \\ \text { Manmers. } \\ \text { Quatity. } \\ \text { Strong points. } \\ \text { Rank. } \\ \text { lnfluence. } \end{array}\right.$ |

BOOKS FOR SUPPLEMENTARY WORK.
History of United States, Ridpath; Story of the American Indian, Brooks; Brief Mistory of Maine, Varney; History of Our Country, Abby S. Richardson; War of Independence, Fiske; Young Folks' United States History, Higginson; Stories from American History, Dodge ; Noble Deeds of Our Fathers, Watson; Life of Columbus, Irving; Nation in a Nutshell, Towle; New England Legends and Folk Lore, Drake; Life of Washington,

Irving ; Life of Samuel Adams, Hosmer ; Life of Thomas Jefferson; Autobiography of Benjamin Franklin; True Stories from New England History, Parkman; 'The Making of New England, Drake; Young Folks’ Book of American Explorers, Higginson; Life of Abraham Lincoln, Holland; Stories of the Civil War, Blaisdell; Battle of Gettysburg, The Making of the Great West, Drake; Sea Kings and Naval Heroes, J. G. Edgar ; English Kings in a Nutshell, Gail Hamilton; Chivalric Days, E. S. Brooks; New England Stories, Hawthorne; Girlhood in New England, Larcom.

BOOKS FOR TEACHERS.
The Historic Method, Sheldon-Barnes; Teachers' Manual of Studies in American History, Sheldon-Barnes; How to Study and Teach History, Hinsdale; Recreation Queries in United States History; Analytical Questions in United States History, Chase; Outline in Uuited States History, Darling ; General History Cards, Freeman; Hints in Teaching History, Rolfe; Topics in American History, Williams; Pathfinder in American History, Gordy and Twitchell.

ALGEBRA AND GEOMETRY.
For suggestions as to topics to be studied in Algebra and Geometry and methods to be used in giving instruction in these branches in the Fifth Grade, teachers are referred to that section of the Report of the Committee of Ten in which these subjects are discussed. No teacher can afford to be withont this valuable document.

## BOOKS FOL TEACHERS.

Mathematical Teaching and its Modern Methods, Safford ; Number and its Algebra, Lefevre; Philosophy of Arithmetic, Brooks.

## PENMANsHIP. <br> BOOKS FOR TEACHERS.

"Manual of Penmanship"-Shaylor.
"How to Teach Penmansbip"-Shaylor.
"Natural Method in Penmanship"-Wells.
"Key to Practical Penmanship"-Spencer.
"Handbook of Penmanship," (Vertical)—Farley.
"'Teachers' Manual for Natural System of Vertical Writing"Ames.

## CIVICS,

Previous to the systematic study of Civics, preparatory work may be begun in the earliest grades by means of conversation lessons in which the teacher becomes more familiar with the intelligence and aptitudes of her pupils and is better able to discover moral deficiencies, and by skillful treatment to aid in their correction. Later, in counection with conversation lessons, stories, sketches, fables, etc. may be used to inculcate moral lessons, and selectious from the Bible and poems should be committed to memory. Gradually this work should be made to cover the duties of children to parents, to their brothers and sisters and to their teachers and schoolmates. Courtesy in all the relations of life should be especialiy emphasized and a strong moral sentiment developed. Kindness to animals and thonghtfulness toward others should form the basis of frequent lessons.

Having led up to the more thorough study of civics it should then embrace a detailed outline of the goverument of the town, county, State and Nation.

Beginning with the town, children should learn what a town is, and what are the duties of selectmen, clerk, treasurer, collector, superintending school committee, superintendent of schools, constables and justices of the peace. A careful study should be made of the origin and importance of the town meeting.

If the school is located in a city a careful study should be made of what constitutes a city; how the mayor, aldermen, common conncil are elected and what their duties are; points of comparison and difference between city and town; charter and how obtained.

Have pupils learn how many alderman are elected in each ward, and who the presiding officer is. The same should be learned in regard to the common council ; joint convention; who presides at such convention; give the mode of election and duties of the treasurer, city clerk, assessors, collector of taxes, truant officer, etc.; how many constitute the school board and how elected; president, secretary, sub-committees; what are their duties and term of office; the election and duties of superintendent of schools, and teachers.

The necessity for a Board of Health, and how chosen; of how many members does it consist and what are their duties.

The duties of a municipal court; where held and when; judge, clerk; by whom appointed, term of office, etc.

Police and fire departments. The necessity of such departments. What officers in each; how chosen and what are their duties. Locate engine houses and describe the fire apparatus of your city or town.

What public buildings in your vicinity? their use and advantage to the community. Name the officers of your county and give their duties, and tell how elected or appointed. Where are the county buildings? What is meant by a shire-town?

What constitutes a State? Explain the powers of the legislative, executive, judicial department.

Under legislative department consider Senate and House of Representatives; duties and powers of each; members and their qualifications; salaries; term of office.

The supreme executive power is vested in what officer? qualifications for office; how elected, and term of office; salary.

Executive council is composed of how many members; how elected; duties; salaries.

Superintendent of Schools is appointed by whom? term of office ; duties.

Supreme judicial court, one chief justice; how many associate justices; appointment; term of office; salaries. Other courts; number of sessions in each county. Superior court; how judges are appointed; term of office; salaries.

Name and locate the State institutions and give purposes for which they are established.

In this connection it would be well to take up population of town or city, county and State; taxes and rate of taxation; methods of voting, etc.

Nation: What constitutes a nation; different departments; constitution of United States.

Under legislative department consider Congress : of what made up ; powers and duties of members; methods of election; qualifications of members; terms of office; salaries.

Under executive: President; qualifications; method of election ; term of office; salaries.

Under judicial: Supreme court; judges; how appointed and term of office ; salaries. Same of Circuit and District Courts.

Cabinet: how appointed; duties; term of office; salaries.
books of reference.
Civil Government, Fiske; Civil Government, Mowry; Civil Government, Martin; American Citizen, Dole; How We are Governed, Dawes; Civil Government, Jownsend; Civil Government, Young; Young American Citizen, Northend; How We are Gorerned, Brooks; School Laws of Maine; State Register.

## NATURE STUDIES.

Pestalozzi says that observation is the basis of all knowledge.
The habit of observation does not come from the study of text-borks. We must find other material to inspire the child with a desire to see the beanties and the wonders that are in the world.

The habit of accurate observation acquired in youth will be worth more to the man or woman than whole pages of carefully learned facts, or correctly performed examples.

Perhaps in no way may this habit be more successfnlly encouraged, or stimulated, than by the study of nature in some of her varied forms. The plant, the flower, the leaf, the seed may help to bring into activity the observation of the child, while the birds, the insects and the rocks call for careful investigation and a skilful use of the eyes.

This work should be begun in the first grades and continued through the entire course. It should not consist of talks and pictures simply, but specimens should be studied and investigated personally by each pupil. In all cases have a system in the work done. First, observe the properties and points of the specimen studied, in regard to its characteristics and uses. Second, describe the object by telling what has been learned concerning it. It has been found of great value in many cases to take four lessons extending through four days on an object studied by a class. When this plan is followed the order of study may be as follows: First day -observe the object carefully, name parts, properties, etc. Second day-review the observation work, extending it so as to embrace causes and results, uses, etc. Third day-make dirawings of its parts and as a whole. Fourth day-write a composition about it. New words that occur in this study should be written on the board and take the place of a spelling lesson. It is much better for the pupils to see new words correctly written than to be obliged to guess at them. In this way too, the nature work may embrace lessons in spelling, drawing and composition, so that but little extra time need be given to it.

Do not allow the child to study a lear or a flower as something apart from the whole plant. Consider it in its relations to its surroundings, and thus bring out its uses and the general plan.

Do not tell the child facts that he can find out. Lead him by wise questioning to see things for himself and then have him describe what he sees in clear and well chosen English. In this way he will add to his vocabulary and increase his ability to express his ideas clearly.

Lead the child to observe first the most common objects near him ; the trees he sees on his way to school, their leaves, bark and form. Let him find out the differences that exist and learn to be alert in discovering new facts.

The plants in the home or schoolroom; their form, structure, buds and blossoms; the insects and birds; their habits and uses. These may form the basis of oral language lessons and will help to awaken the interest and curiosity of the pupils.

Memory gems and selections of poetry learned in connection with this work will be of the greatest value, not only for the benefit derived from the act of memorizing, but from the habit formed of associating choice thoughts of great writers with the world of nature.

Let the children plant seeds in bottles in the schoolroom where the process of germination may be noted, and the roots, stem, leaves, bud and blossoms studied.

Observe how the flowers grow on stalk or stem, in clusters or singly. Notice the parts of the flower; calyx, corolla, sepals, etc. Of what use are they? Stories on the subject may be told or read by both teacher and pupils and reproduced by the class.

In the study of trees notice the parts ; the stem, its bark, color, use ; the leaf-scars ; the buds; where found? the wood; its color, value, use. Scales are covered with what?

Children may become greatly interested in the trees. Lead them to recognize all the different species in their neighborhood and in the town. Hare them describe the different parts of the tree; roots, trunk, branches, leaves, their structure and uses, also the varieties they like best and why.

Continue the practice of learning selections and quotations and encourage the children to look for poems on nature. Much of this work may take the form of compositions; and as the children advance, many will be interested to preserve the leaves and flowers studied, and they should be encouraged to make books in which the written lessons and the poems learned may accompany the leaves
or flowers. Much interest and enthusiasm may be aroused in this way.

In connection with plant life some elementary work may be done in the study of the soil; its formation, kinds, composition, value, the crops it will produce, etc.

The most common minerals, such as mica, quartz, feldspar and granite, may be studied so that pupils can recognize them easily and be able to tell their color, degree of hardness and structure; also whether transparent, translucent or opaque; elastic, flexible or brittle; where the specimen may be found; its uses and its name.

Lessons on the birds found in the vicinity of the school should be given. Their color, song, habits, time of departure and return, name, etc., may be learned.

Common insects like the ant, fly, bee and many others afford endless material for lessons both oral and written, and will often prove of inestimable value to the child in leading him to realize the wonders of animal life that he has hitherto passed by as too insignificant to notice.

In all this work the great aim of the teacher should be to lead the child to use his eyes to see, his ears to hear and his mind to grasp the little things about him; to be quick to discern what is really wonderful; to contrast and compare rapidly and to realize that he lives in a world of beauty and that he has an interest in learning to appreciate it.

One of the principles of modern pedagogy is that wherever possible there should be direct study of the object itself instead of indirect study through the language of the text-book. Certain departments of nature study lend themselves with special facility to this method. Natural history and mineralogy are among the subjects that train to accuracy of observation. A prominent Massachusetts lawyer said that he felt indignant whenever he thought of the complete failure of his teachers to open his eyes to the attractions of nature.

Many teachers would gladly meet the new demands made on them, but they feel in doubt as to the best methods. The following questions are designed to assist in the solution of the problem. They are intended to be suggestive merely, and are by no means to be copied or used as a whole. Do not go too rapidly; a single
question may sugest several others: a little farm well tilled will be more productive than many acres lying waste. It takes time to acquire and digest knowledge. By the principle of apperception the new truth is gradually assimilated with previous knowledge.

The answers to these questions will be found in books, in conversation with parents and teachers; but, above all, in direct observation of the objects themselves. The questions are largely the result of direct study of nature and they fail of their purpose unless they stimulate to personal research. The teacher who catches the spirit of such works as White's Natural History of Selborne, Agassiz's Geological Sketches, Thoreau's Walden, Burrough's Wake-Robin, 'Torrey's Birds in the Bush, Bolles' Land of the Lingering Snow, will not go far astray. The excellent textbooks now published in the different branches, such as "Wild Flowers and Where They Grow ;" "Our Common Birds and How to Know Them;" "Thirty-six Observation Lessons on Common Minerals," "Scaside and Wayside," will also be found helpful. Above all, however, teacher and pupil must be brought into direct, sympathetic, loving contact with nature. If the eyes are once opened, materials for interesting and profitable study will never be lacking. Each recurring season will bring with it new friends and new pleasures.

The value of this work is not to be measured by, or found in the answers, but will be dependent upon the power and appreciation that come from the searching, questioning and studying of nature and books and the habits that are formed and the love that is engendered.

## QUESTIONS ON PLAN'T LIFE.

## I. QUESTIONS FOR FALL STUDY.

1. How many kinds of goldenrod can you distinguish? By what differences do you know them? Is there one among them of a creamy-white color? What is the prevailing color of flowers of the later summer? Taking the year through is the same color the most common? 2. When is the cardinal flower in full bloom? In what localities is it found? What color is the fringed gentian? What poem describes this flower? Is the closed gentian found in your vicinity? 3. How many species of Indian pipe are there? What color is it while growing? To what color does it turn after
being picked? Where are fall asters most abundant? Collect several species and notice how they differ. Why are they sometimes called frost flowers? 4. What peculiarity in the leaves of the thoroughwort? What kind of honey-suckle has the same characteristic? What are such leaves called? Do you know the JoeBye weed or Queen of the Meadow? What color is its blossom? How do its leaves differ from the leaves of the common thoroughwort?
2. What color is the flower of the chicory? What are flowers called that consist of many little flowers standing on the same disc? Does the daudelion belong to this class? Does the dandelion ever bloom late in the fall? What spring flowers can you name that sometimes open in the fall?
3. When does the witch-hazel bloom? When are its seeds ripe? How are they thrown to some distance? How does the jewel-weed or touch-me-not scatter its seed? The pansy? The burdock? The tick-trefoil? The bur-marigold? 7. Describe two or more kinds of evening primrose. How are the stamens arranged in the common evening primrose? Why is an opening left between them on one side?
4. How many kinds of nuts grow in this town? When is the hazelnut ripe? How does its covering differ from that of the butternut? How do white oak acorns differ from red oak? Which one of these matures from the blossom the same year? Which the second year? Does the oak tree have one kind of blossom, or two kinds? How long are the catkins of the butternut? Why do they drop off so early? How are beech nuts protected until ripe? How do squirrels get at the meat of nuts?
5. What are the most valuable wild berries in this State? Make a list of them in the order of their ripening. Is this statement correct in regard to New England: "Edible wild fruits thrive everywhere. The huckleberry, blackberry, and wintergreen are the most valuable." What is meant by the wintergreen? What is its common name in Maine? Do you know more then one kind of wild strawberry? Is the elderberry used as food? 10. How many kinds of wild cherries have we? On which one do the leaves turn to a flaming red in autumn? What maple has its autumn color a bright red? Do you remember the color of its flowers? To what color do the leaves of the red oak turn? of the beech? elm?
hobblebush? sumac? Why do the leaves turn? What leaves are earliest in turning? How late is the foliage of the wild rose beautiful? of the low blackberry? 11. What are some of the ways in which the autumn prepares for the coming spring? What plants blossom one year and produce fruit the next? How fully are alder tags developed in the fall? willow catkins? Mayflower buds? In what stage of growth does the hepatica pass the winter? How do trees and shrubs prepare for the winter and the spring? perennial herbs? grasses?
6. Name some of the seeds that are self-sown and that spring up the following spring. What kinds of grain may be planted in the fall and allowed to spring up before winter? What wild plants spring from bulbs that send out new growth from year to year? What bulbs may be planted in the fall for spring blooming? Name some plants that remain green and fresh all winter. What berries are under the snow? 13. How many kinds of grasses can you identify? How many kinds of grain in the ear? How many as separate kernels? How many trees can you identify from a single leaf? (Let this be tried by different persons at an evening gathering, or at school, by distributing twenty or more different leaves to each.) What is the shape of the seed samara, or keys of the maple? ash? elm? 14. How many of our wild flowers can you name by their fruits or seed capsules? What is the appearance of the fruit of the wake-robin? of the clintonia? the baneberry? the jack-in-the-pulpit? the twist foot? What red berries on bushes might be used for ornamentation? what on trees? on a climbing vine? on a trailing vine? What poisonous leaves must you avoid in gathering autumn leaves? Is it the three-fingered or five-fingered ivy that you can handle safely? How can you tell the poisonous sumac from the harmless?
II. QUESTIONS FOR WINTER STUDI.
7. What are some of the trees that shed their leares? What are such trees called? If you cut a branch from a tree after its leaves have fallen, how can you tell how many years old its different parts are? how many leaves it had the previons year? how many buds for the next year? how its leaves were placed on the stem? in what winter wrappings the buds are protected? What other points about trees can be studied jast as well without the leaves? How
many of these trees can you name in their winter form? 2. What are evergreen trees? What evergreen trees are common in Maine? Do these trees ever shed their leaves? With what is the ground covered under pines? What office do leaves serve on the tree? What after falling? How many leaves in each cluster of the white pine? in the red pine? in the scrub pine? compare the cones on several kinds of trees and see if the shape of the cone has any relation to the shape of the tree. How are the seeds placed in the cones? How are the bills of crossbills fitted to get at these seeds? Are there any cones of which men use the seed for food? What trees have the trunk running continuously to the top? What are the tallest trees in the world? What trees give the greatest extent of shade? 3. What is snow? What is its office with respect to plants? Where does it tend to accumulate? What are some of the weeds whose seeds furnish food for birds? What are the most important kinds of wood for building purposes? for making furniture? for fuel? Why is lumbering carried on chiefly in the winter? Name the kinds of wood in a wood-pile and describe the trees from which they were cot. What kinds are soft wood? hard? Which make the quickest fire? The most lasting? What is charcoal? How prepared? What are its uses? 4. What is the sap of the rock maple used for? Describe the whole process from tapping the trees to the final products. How many kinds of birch trees have we? What uses have been made of birch bark? What kinds of bark are used for tanning? What is the effect on fruit trees if they are girdled by mice or other rodents? Where is the new growth made in the tronks of trees? When will the bark peel most easily? What trees are most valuable for shade trees? $\check{5}$. What kinds of fruit grow in this State? Describe each kind so as to distinguish it from all the others. What are the chief garden vegetables? How are these kept throngh the winter? When do they produce seed? What bulbs are most suitable for winter blooming in the house? What trees are usually chosen for Christmas trees? What trailing evergreens are also used for Christmas decorations?

H1. QLESTIONS FOR SPRIN( STCDY゙.

1. What signs are there in the fall of preparation for the coming year. As spring approaches what are some of the earliest tokens of its coming? Where is green grass first seen? Where does the snow linger longest? How early does the skunk-cabbage bloom? Have you ever seen its flower? Where do you find the earliest hepaticas? Which blooms earlier, the hepatica or mayflower: Where do you find the first blnets or houstonias? How are the leaves of the early saxifrage arranged on the stem? Why is the bloodroot so named? 2. What species of violet come earliest into bloom: How many kinds of violets do you know? Make a list of at least five rarieties. What garden flower rescmbles the violet? Does the spring-beanty grow in this locality? What sort of root has the dog-tooth violet or adder's tongue? Is it a violet or a lily? 3. How early does the elm blossom? Which appear earlier, the blossoms or the leaves? When are its seeds ripe ? Why are some willow catkins yellow while others are greener in color? Do you find both kinds on the same bush or tree? What are the yellow ones for? the greener ones? When the seeds of the willow are ripe, how are they scattered? What do the alder tags produce? What are the alder cones for? Which remain longer on the bushes? Are both kinds found on the same bush? Name other trees and plants that have two kinds of blossoms. When is the red maple in bloom? Are its blossoms of two kinds?
2. What is the earliest species of buttercups? How many different kinds can you distinguish? What is the tallest kind? What one has the largest flower? What one produces tiny flowers close by the edge of water? What one is white? 5. Examine seeds of morning glories, peas, beans, squashes and describe their coatings, cotyledons, embrycs. Plant these seeds and carefully examine the results at different stages of growth. Describe the serd-leaves, or first leaves of maples, beeches, apple trees. Plant corn, wheat, oats, and make a similar study. Do the first leares from such bulbs as crocuses, snowdrops, tulips resemble plants which have two cotyledons, or one? 6. How do the leaves of dicotyledons differ from those of monocotyledons? In which division do you find three-parted flowers: How many kinds of trilliums can you find? Which one has an offensive oder? Which
one has delicate purple tracing on its petais? How many parts in each whorl of the flower?
3. What are the four whorls, or parts of a complete flower? Name the divisions of each part. What is the office of the two outer whorls? Why are the petals bright colored? What do the stamens produce? the pistils? What are the two parts of each petal? the three of each stamen? the three of each pistil?
4. Study the stages in the life of a dandelion blossom. How long is the stem when its florets first open? What is the condition of the flower just before its seeds have ripened? What changes in the stem and in the stipe of the pappus when the silvery globe is fully formed? What changes have occurred in the involucre in the different stages? What is the form of the corolla in the separate florets? To what great family does the dandelion belong? How does the orange hawk-weed resemble the dandelion? How do the white-weed and cone-flower, or yellow daisy differ from it?
5. What is the use of the lip of the lady's slipper? When an insect gets into it, how does he get out? Which lady's slipper has only radical leaves? which stem leaves? Which cypripedium is the most beautiful? where does it grow? when does it open its flowers? Where is the calypso found? Can you name any other orchids?
6. Under what trees is the fringed polygala specially abundant? do you know where the pure white variety is found? Where do you find the twistfoot? clintonia? yellow root? Indian cucumber root? chickweed, wintergreen or star flower? the wild columbine? pitcher plants? the arethusa? rhodora?
7. What month is the month of apple blossoms? of roses? How many sepals, petals, stamens, and pistils have each? In which one of these do the numbers differ? What is the shape of the petals of the shadflower? How many petals has the strawberry blossom? How does it resemble the apple blossom? What part of the blossom becomes the fruit? Can you find the young fruit in the apple blossom? What parts of the blossom fall off? What parts can be found in the fruit? How are currant blossoms arranged on the stem? Can you find any trace of the blossom in the fruit? How many flowers does it take to produce one partridge berry? Does the berry show this? 13. Are the petals of the sweet pea blossom alike, or different in form and size? What is the upper one called? the two side ones? the two lower ones?

Name other blossoms of similar structure. How many kinds of clover can you distinguish? Which of them are of little value in agriculture? 14. Are the petals of the morning glory separate, or united? What other flowers resemble morning glories in this respect? What trailing vine has its blossoms in twin hanging bells that are very fragrant? Where do the hare-bells grow? Describe the flowers of the bush-honeysuckle. In the high cranberry how do the outer flowers differ from the inner? Which of these do the flowers of the snowball resemble? Do the flowers of caltivated hydrangeas produce seed? How does the hobble bush compare with each of these? 15. What is meant by cross-fertilization? How are many plants dependent upon insects to accomplish this? How are the anthers of the common sage adapted to this purpose? of the barberry? Study the flower of the iris and tell why the stigma is more likely to receive pollen from a different flower. Can you find any other traces of similar contrivancs?
16. Describe two species of wild lilies. Is the water-lily a lily? In what localities is the wild calla found? Where are the real flowers in the Jack-in-the-pulpit? What part of the flower are the four white petal-like leaves of the bunchberry or dwarf cornel? 17. What are the feather-veined leaves? radiate-veined? parallelveined? Name and describe typical leaves of each kind. What are stipules? What are compound leaves? What are the separate parts of a compound leaf called? Name some plants with round stems; triangular; square. 18. From what are flowerless plants produced? Name three or four kinds of equiseta, or rushes, and shake out the spores from the fertile plants. IIow large did similar plants grow in the carboniferous period? What are mosses? lichens? fungi? moulds? algae? 19. What three kinds of ferns are called flowering ferns? which of them has the spore-bearing parts only at the ends of the fronds? which for a short space in the middle? which on a separate, smaller, cinnamon-colored frond? Where are the spores in the maiden-hair? in the wood, or Christmas fern? in the common brake? in the spleenworts? in the ostrich ferm? in the frost fern?

## AN APPLE CENTURY.

ONE HUNDRED QUESTIONS ON THE APPLE.

1. How do apples differ in color, shape, size, taste? 2. Is it any advantage to the apple to be bright colored? 3. Do birds ever eat apples? 4. Do squirrels eat apples? 5. Do these animals scatter the seeds? 6. What coats or substances are there from the outside to the centre of the apple? 7. Describe each of these layers. 8. What is the depression on the end opposite the stem called? 9. How many projecting parts on the edge of this depression? 10. What part of the blossom did they form? 11. Can you find any other part of the blossoms in this hollow? 12. How many seed cells in the centre of the apple? 13. Does this number have any relation to the parts of the flower? 14. Describe these cells in position, shape, and structure.
2. Name the parts of the flower from the outer whorl to the centre. 16. Name the separate divisions of each part. 17. How many parts are there in each whorl? 18. How many seeds in each cell? 19. How many coats has each seed? 20. Name and describe each of them. 21. By what natural process would the seed escape from the apple? 2\%. How many lobes has each seed? 23. What is their botanical name? 24. What is their use? 25. What is the shape of the seed? 26 . In what direction does the smaller end point? $2 \overline{7}$. Are the seeds loose in the cell or attached to it? 25. Is there anything between the lobes of the seed? 29. From which end does the rootlet proceed? 30. How many leaves has the young plant? 31. What are such plants called? 32. Name other plants which have the same number of seed leaves. 33. Name some plants which have but a single seed leaf. 34. What are such plants called ?
3. How do the first leaves of the apple tree differ from the later leares? 36. From what part of the blossom is the fruit formed? 37. Name other plants which have similar blossoms. 38. Do any of these produce edible fruits? 39. Is the rose-apple ever used for food? 40. To what great family do all these plants belong? 41. What is the use of the skin of the apple? 42. What happens if this is bruised or cut? 43. How should apples be gathered? 44. What are some of their uses? 45. How many varieties of
apples are there? 46. How early are the first apples ripe? 47. Name some of the earlier varieties. 48. Describe some of the later varieties. 49. How long will some of these keep? 50. What is the best way of keeping them? 51. How do different varieties originate? 52. Do apples grow true from seed? 53. How can choice varieties be propagated? 54. Describe the process of budding. 55. Describe the process of grafting. 56. Why does the bud or scion determine the kind of fruit? 57. How are dwarf trees produced? 58 . What soil is most favorable to the apple? 59. What climate? 60. Name some states and countries where apples are raised. 61. Which way should an orchard slope? 62. How near together should the trees stand? 63. How and when should the trees be pruned ?
4. What are some of the enemies of the apple? 65. How can these be guarded against? 66. How early can the flower buds be seen upon the branches? 67. Do they ever open in the fall? 68. How are the blossoms arranged with reference to one another? 69. Under what circumstances can blossoms be picked from a tree without doing harm? 70. Why do growers sometimes thin out the fruit when partly grown! 71. Of what use are the petals? 72. What insect friends has the apple blossom? 73. What birds frequent orchards? 74. What good do they do? 75. What determines the length of stem left on an apple? $\mathbf{7 6}$. Is there any advantage in this definite place of separation? 77. How are the leaves arranged on the stem? 78. What comnection is there between the arrangement of the leaves and of the branches? 79. If you pass a thread on a leafy branch from the foot of one leaf stalk to the one next above it, and so on, how many times will the thread go around the branch before you reach a leaf directly over the first? 80. How many leares do you pass, counting the first but not the last? 81. What is the general shape of the leaf? 82. Describe the margin of the leaf. 83. How can you tell the age of the different parts of a branch? 84. What effect does freezing have on an apple and why: 85. What part of the apple's weight is water? 86. What is the difference between dried apples and desiccated apples? 87. What kind of apples are used for making cider? 88. How is cider vinegar made?
5. What fruits most nearly resemble the apple: 90. What kind of wood does the apple tree make? 91. What parts would be found in a cross section from the outer bark to the centre?
6. At what point is the new growth made? 93. What are plants that grow in this way called? 94 . What is color of the new wood? 95. What is the color of the older growth? 96. How does a section tell the age of the tree? 97 . What is the office of the root? of the trunk? of the leaves? 98 . What part does the sunlight bear in the growth of any plant? 99 . What is the place of the apple in literature? 100. What did Newton learn from a falling apple?

## QUESTIONS ABOUT ANIMALS.

1. What is Natural History? What two branches has it? What is the difference between a plant and an animal? Is it easy to tell the difference in the lower forms? Why? 2. In what respect is man an animal? What are some of the varieties of men? How do men differ from all other animals? Name some of the parts of the human skeleton. Name some of the bones of the head; of the trunk; of the limbs. What is the column of bones called which extends from the head through the trunk? Do any other animals have such a column? What are such animals called? What does invertebrate mean? Name some animals that have no backbone. 3. What are milk-giving animals called? What animals have feathers and wings? To what class does the bat belong? What animals have the body covered with scales and creep upon the ground? What changes take place in frogs and toads? What animals have fins, breathe by gills, and live in the water? Name five classes of vertebrates. 4. What animals most nearly resemble man? Describe the gorilla. What can you tell about the sacred monkey of India? Where does the Barbary ape live? Where are the howling monkeys found? How large are the marmosets? How do monkeys sometimes cross a river? In what climate do they live? What are some of the countries where they are found? What is their food? Why are they called quadrumana?
2. What are four-footed animals called? What is the difference between claws and hoofs? What are canine teeth? What are cutting teeth? Grinding teeth? What are animals called that live on flesh? 6. What do seals live on? Where is the fur seal found? How does the walrus differ from the seal? 7. How do the feet of a cat differ from those of a dog? Name other beasts of prey that resemble the cat. Where do the tigers live? Is it any advantage
to them to be striped? Describe the tongue of a cat. Where are lions found? Is their tawny color of any service to them? Tell what you can about the leopard; the puma; the jaguar. How does the wild cat differ from the domestic cat? 8. What animal is most completely the companion of man? Why are there more varieties of domestic animals than of wild? Name different varieties of dogs. In what ways are they useful? What is the meaning of the line, "Like the hare before the beagle?" Where are wolves still found? What wolf story can you tell? Is the fox more like a dog, or a cat? Where does the jackal abound? What good does the hyena do?
3. Why does a weasle change its color? Name other animals with long, slender bodies and habits similar to the weasel. Do any of these furnish raluable fur? What animal has a specially offensive odor.
4. Why is the polar bear white? What bear is found in this State? How large is the grizzly bear? How do bears walk? How does the raccoon resemble a bear?
5. What are animals called that chew the cud? How many kinds of camels are there? What good does the hump do? Where is the giraffe found? IIow many kinds of deer are there in this State? What is the law in regard to killing them? How have the American bisons changed in number? Of what service are the reindeer: LIow do antelopes differ from deer? What do sheep furnish us?
6. What animals resemble the horse in appearance? Describe the hippopotamus; the rhinoceros. How many species of elephants are there? What do they use the trumk for? Where is the tapir found?
7. Is the whale a fish? Name and distinguish two kinds of whales. What is the largest living mammal?
8. What is the only flying mammal? Describe its wings. Of what service are moles? How many species of squirrels in this State? What are animals called whose teeth are formed especially for gnawing? Name and describe some of these. Why does our northern hare change its color?
9. How do birds differ from mammals? How do they compare with them? How do they differ from and agree with reptiles? Why are some birds called land birds and others water birds? What are birds of prey? Name two kinds of eagles. Which one is "the

American eagle?" Name several kinds of hawks. How many kinds of owls are there in this State? What good do vultures do? Are hawks and owls useful, or injurions? Describe the bills and claws of birds of prey.
16. Why are the toes of perching birds long and slender? Why are they placed on the same level? Name some birds that are sweet singers. Name some in which the males are the more highly colored.
17. Name some of the groups, or families belonging to the perching birds. Name the birds of the crow family. Why is it difficult to approach crows? How do the blue jay and the Canada jay differ? 18. What are the habits of the fly-catchers? Why is the kingbird an appropriate name for one of them? 19. Name some of the thrush family. Which one is most familiar about our houses? Which one has the sweetest song? Which one returns earliest in spring? 20. What birds belong to the warblers? Describe the summer yellow-bird, the oven-bird, the Maryland yellow-throat, the redstart. How many species of swallows have we in Maine? Describe the nests of each species. 22. What are some of the birds of the finch family? Describe one species, at least, of grosbeaks, sparrows, buntings, goldfinches.
23. Describe the nest of the Baltimore oriole. At what time in spring does the crow-blackbird return? Where can the red-winged blackbird be found? Tell the story of the bobolink's life. 24. What are the climbing birds? How many kinds of woodpeckers can you describe? Where do they build their nests? Describe the nest of the chimney-swift; of the humming-bird. What color is the cuckoo? How large? What is its note? Where are parrots found? What time of day do you see the night-hawk? When do you hear the whippoorwill?
25. What birds are called scratching birds? In our common fowl how is the hind toe placed with reference to the other three? Where are turkeys found wild? How do the ruffed grouse and the Canada grouse differ? What change of color in the ptarmigan?
26. Do we have any running birds in this country? What is the largest living bird? Is it right to wear feathers on hats? Is it right to use small birds in this way?
27. What water birds may be called swimming birds? What wading birds? Describe the bill and feet of the duck. Name other birds of similar structure. Describe the wings of the gull.

How are the feet of the loon and of the grebe placed? How large are their wings? What do they use them for: 28 . How long are the legs of the great blue heron? What birds run along the shores of ponds and rivers: What use do the snipe and woodcock make of their long bills? How are their eyes placed! 29. How are turtles protected from their enemies? Where is the vertebral column in these animals? Where are crocodiles found? Alligators? For what are chameleons noted? Describe the feet of the gecko. How do our suakes pass the winter? Are there any poisonous serpents in this State? When are frogs heard most prominently? What is the water-newt often mistaken for?
30. How are the vertebre joined in the backbone of a fish? How do fishes breathe? What are some of the most valuable fishes for food? Which of these are found in our lakes and along our coast? 31. What is an insect? Why so named? What does metamorphosis mean? What changes take place in the potatobeetle? Name and describe the three stages in the life of a butterfly, mosquito, moth, and harvest-fly or cicade. How many kinds of bees are there in the same hive? Is the dragon-fly ever harmful? What good do flies do? How was the gypsy moth introduced into this country? How do crickets produce their music? How are the leaf-butterflies protected by coloration? What kind of eyes has the house-fly? What proof do ants give of intelligence? What do walking sticks resemble? What are centipedes? Are spiders ever large enough to entrap birds?
32. What animals are called crustaceans? By what means do lobsters move their claws? How does the acorn-barnacle get its food? What kind of a house does the hermit-crab live in? 33. What are mollusks? How does the clam shell grow? Describe the shell of the chambered nautilus? Who wrote a poem about this shell? How do suails walk? 34. Is the earth-worm useful? For what are leeches sometimes used? 35. Describe the starfish; sea-urchin; coral polyp. How are coral reefs formed? What animals can be seen only with the microscope? What are some of the advantages to be gained by the study of Natural History?

## QUESTIONS ABOUT MINERALS AND ROCKS.

1. What is soil? how is it formed? what are the chief parts that compose it? How can you separate the clay and loam from the sand? Do plants if allowed to remain where they grow enrich or impoverish the soil? if removed by harvesting? Where do plants get the greater part of their carbon? What do they take from the soil? Do all plants take the same substances from the earth? What advantage in the rotation of crops? If ground lies fallow does it grow richer or poorer? What should be the effect of cultivation on the soil? 2. What is meant by a freshet? At what time of year is one most likely to occur? How does a river at such a time differ from its usual condition in width, swiftness, color? What causes the change in color? Where will the matter thus carried be deposited? Will the coarser and finer materials settle together? What will be formed where the finer materials accumulate for successive years? what where the coarser? Would the sand or clay be carried the farther? What does consolidated sand form? clay? a mixture of the two ? What do we call a rock composed of rounded pebbles imbedded in sand or clay?
2. What happens if you stir thoroughly together in a jar of water some clay, sand, pebbles, and allow the whole to stand at rest? Which settles first? next? last? Can you see the different layers through the glass? What do we call layers deposited from water? If a layer consists of several, very thin, successive deposits, what are these parts of a layer called?
3. How are the toys called marbles made? If broken pieces of rock are carried along by water what action takes place upon them? Where can you find pebbles and rocks that show the effects of this action? What is a gravel pit? Where they have been taking away the gravel can you see the materials arranged in layers? Are there collections of finer materials and others of the coarser? 5 . How many kinds of minerals can you find in a piece of coarse granite? Do you find one with irregular, broken surfaces, a glassy lustre and harder than the others? Can you scratch it easily with a knife? Will it scratch glass? Do you find another white or flesh color with smooth surfaces in some places? How will you describe the third? Name the three minerals in granite in the
order of their hardness. Which constitutes a larger part of its mass than either of the others? Which one varies most in color? On a knob of granite exposed to rain, snow, and sand blown by the winds, ridges of mica stood up higher than the other materials. How can you explain this fact? How is the sand-blast used for cutting glass? Are softer, or harder substances cut most readily by the sharp sand? What are the uses of granite? What state leads in granite quarrying? What is binary granite?
4. What is a crystal? What is the shape of quartz? crystals? What is rose-quartz? smoky-quartz? milky? What color is amethyst? What is the appearance of agate? moss-agate? jasper? onyx? What are cameos? How was tlint used for arrowheads? gun flints? What are the uses of quartz? What materials are used for making glass? How is window-glass made? plate glass?
5. What are the uses of feldspar? Where in this State is it quarried? What is formed when feldspar is decomposed? From what is porcelain made? the common clay pipes? Why are bricks red? What is the sunstone? the moonstone?
$r$. What are some of the different colors of mica? Is there any difference in hardness? What is the white, or silvery mica called? the black? Which one has a commercial value? Where is it quarried? For what purposes is it used?
6. What rock has the same composition as granite, but has a stratified structure? What is mica schist? What is syenitic granite? What mineral is combined with feldspar to make the rock properly called syenite? What different colors may the feldspar have in syenite? What colors may hornblende have? What is the name of the light-colored fibrous variety that may be woven into cloth? What peculiar property has the cloth made from it? What are some of the uses of asbestos? Where is it found? 10. What is lime used for? What is the difference between quick-lime and slacked-lime? between mortar and plaster? What is limestone? Where in this State is it quarried? How is it changed to lime? What is chalk? Where is chalk obtained? How do letters look throngh a piece of Iceland spar? How are stalactites formed? stalagmites? Where is marble quarried in New England? What are its uses? What is the chief constituent of shells and corals? How can limestone be known by the acid test? What is coquina? 11. Is gypsum harder or softer than limestone? Name three rarie-
ties of it? What is plaster of Paris? What are its uses? What is the "plaster" used as a fertilizer? Will gypsum effervesce with an acid? Is tale harder or softer than gypsum? What color is the streak made by it? What different colors has talc itself? What is soapstone? Where is it quarried? What are its uses?
7. What color are garnets? What is their shape? In what rocks are they found? What are they sometimes used for? What is the usual color of tourmalines? How many sided are its crystals and how are they shaped at their ends? What other colors sometimes occur? Where in Maine are choice specimens found? 14. What are the precious metals? Where is gold found? in what different forms? By what simple test with the knife can gold be told from any substance looking like it? Will any acid act upon gold? How can it be dissolved? What are its uses? What color is silver? What acid will dissolve it? What are its uses? Why is not pure silver used for coins?
8. What is aluminum? From what source is it obtained? What is its color, weight, strength, cost, use? Describe learl, copper, tin, zinc in color, source, hardness, weight, use. How does platinum occur in nature and what properties give it special value? 16. What are the three chief ores of iron? What is the color of the streak of each? Which one is strongly magnetic? How is iron obtained from its ores? What states produce large quantities of iron? What are the uses of iron? How does steel differ from iron?
9. What are the uses of coal? What is the source of the energy stored up in it? Where are the great coal beds of this country? What are the two chief kinds of coal? Which is harder? Which burns with a smoky flame? Which kind is most used in our stoves and furnaces? How was coal formed? What plants contributed most largely to its formation? How large are our modern ferns? rushes? club-mosses? How large were those that make up the coal? What is the diamond? graphite? their uses? How do these differ from the varions forms of coal? What is charcoal? How is it prepared?
10. What is the origin of slate? its uses? Where in Maine is slate quarried? How does slate differ in hardness? What is clayey shale?
11. What proofs have we of great heat in the interior of the earth? What is a volcano? What are some of the most noted
recent eruptions? What is lava? What is pumice stone? how is it formed? what are its uses? Where are hot springs found? What do many of them deposit? Why?
12. Did plants or animals appear on the earth first? How do the rocks preserve the record of the world's life? What cases can you name to illustrate the preservation of the original substance of plant or animal? of its petrified form and structure? of its cast? of footprints or other traces? What were some of the earlier forms of plant life? of animal life? How do we judge the relative age of different rock? What four divisions are made of geological time? What was the earliest form of North America? What can you tell of its gradual growth?
13. What is snow? ice? a glacier? Where are glaciers now found? How fast do they move? How do they transport rocks? How do they mark the rocks under them? What proofs have we that Maine was covered with ice at the last glacial period? How far south does the glacial drift extend? What traces of glacial action are found on bare ledges? What are moraines? boulders? horse-backs or kames? Of what are these kames composed? How were the materials composing them transported to their present position? Why are our common boulders rounded in form? Why is the top of Mount Washington covered with rocks with sharp angular edges?

## BOOKS FOR PUPILS IN NATURE STUDIES.

Readers in Botany, Newell ; First Book in Botany, Miss Youmans; First Book of Zoology, Morse; Animal Life in Sea and Land, Cooper; Butterflies, Scudder; Birds Through an Opera Glass, Merriam; A Year Round, Edith 'Thomas; Upland and Meadow, Abbott; Little Folks in Feathers and Fur, Miller; First Book in Geology, Shaler; Common Minerals and Rocks, Crosby; About Pebbles, Hyatt ; The Beanties of Nature, Lubbock; Fairyland of Science, Buckley; Ants, Bees and Wasps, Lubbock; Concerning a Few Common Plants, Goodale; The Food of Plants, Laurie; Flowers, Fruits and Leaves, Lubbock; Fairyland of Flowers, Pratt; Leaves from Nature's Story Book, Kelley ; Stories of Industry, A. Chase and E. Clow ; Tenants of an Old Farm, McCook ; Our Common Birds and How to Know Them; Moths and

Butterflies, Ballard; Story Book of Science, Buckley; Steps in Scientific Knowledge, Bert; My Land and Water Friends, Bamford; Madam How and Lady Why, Kingsley; Look About Club, Bamford; Eyes Right, Richardson; Commercial Products of the Sea, Simmonds; Young Folks' Ideas, Uncle Lawrence; Open Sesame, Bellamy and Goodwin; Nature Myths and Stories, Cook; Flower People, Mrs. Horace Mann; All the Year Round, Strong; Animal Memoirs, Lockwood; Native Trees, Russell; Arbor Day Manual, Skinner; School Speaker, (Arbor Day Number,) Harper.

## BOOKS FOR TEACHERS.

Nature Study, Payne; Nature Study for Common Schools, Jackman; Science Teaching, Howe; Natural History Object Lessons, Object Lessons and How to Give Them, Ricks; Science Teaching in the Schools, Rice; Observation Lessons on Common Minerals, Clapp ; First Lessons in Minerals, Richards ; Directions for Teaching Geology, Shaler; Birds of Eastern North America, Chapman; Guide to the Study of Insects, Packard; Aspects of the Earth, The Story of Our Continent, Shaler : About Pebbles, Hyatt; First Lessons in Chemistry, Phenix ; Simple Experiments for the Schoolroom, Woodhull; Chemistry of a Candle, Faraday; Poetry of Flowerland, Bryant; How to Teach Physiology, Blaisdell; Nature Study and Related Subjects for Common Schools, Jackman; Child Garden of Verses, Stevenson.

## DRAWING.

INTRODUCTION.
The following syllabus of a course of study in form, drawing and color has been prepared after a careful study of the best work done in these lines in public schools in different parts of the country.

The work is laid out for all the grades below the high school. Conditions vary in different places, and it is not expected that all schools will be able to carry on the work in complete accordance with the outlines here presented. It is, however, recommended that its spirit, general order and methods be carefully followed even where it may be temporarily impracticable to fully work out all its details. Teachers are especially urged to make the study of form in solid models and objects the foundation of the whole work. Tablets can be used to advantage only after the solid form has become familiar as a whole, and when it is desired to proceed from the study of a form as a whole to the study of its parts (surface, faces etc.)

It is also greatly to be desired that pupils' work shall be as free and individual in character as is consistent with thoughtful and good work. The true service of the teacher consists not simply in encouraging spontaneity and originality. It consists also in unobtrusively leading pupils to prefer and to practice what is essentially right and beautiful in the work of both minds and hands.

# SYLLABUS OF FORM, DRAWING AND COLOR STUDY. 

 FIRST GRADE.
## FIRST AND SECOND YEARS.

Sphere, cube, cylinder, hemisphere, square prism and right-angled triangular prism observed both in the type models and in natural and manufactured objects resembling the types. The solids should be studied in the order given above, the children being given a variety of objects like each type and led to see that in each case the type model in itself represents a whole group of objects which resemble each other. Teachers are especially recommended to make collections of simple, interesting and beautiful objects resembling the type forms to be studied. This can be done at little or no expense in money if enough thought is given to the matter.

As each solid is taken up in turn for individual study it should be observed first as a whole; each child having an opportunity to handle the models as well as to see them. It should be drawn freely (in outline) on blackboard, slate and paper, modeled in clay and used in building and arranging. Next, the surface of the given model or object should be studied, leading to a knowledge of the simple plane figures that can be derived from it (circles, square, oblong, etc., etc.)

Tablets cut in the shapes of these plane figures can then be used to advantage in decorative arrangements. Paper can also be folded and cut to produce similar figures. The study of edges in the solids and in the tablets should lead to exercises in stick laying, the sticks representing edges. Drawing of these arrangements of tablets and sticks should be encouraged as well as drawing of models and objects as wholes.

The work should be conducted on the principle of learning through doing. The modeling, drawing, tablet and stick laying, and paper folding should be the expression of the children's thought about things they have observed or (occasionally) imagined. Dictation should play but a small part in these first exercises. Children should not be hampered by many rules but rather be led gradually to proper pencil-holding, correct position, etc.

Color Study.* Show chart of the color unit (chart containing red, orange, yellow, green, blue and violet, with six intermediate colors.) Show also, if possible, the color band produced by the falling of sunlight on a glass prism. Give children tablets of the same colors (12) as shown in the color chart. Let them select the one they like best; find the one that looks most nearly like their first choice, etc., etc. Let successive exercises of this sort, at proper intervals, strengthen the children's feeling for resemblances and differences in color till they can lay their color tablets with fair accuracy, in the order of their color relationship. Let this be a matter of growing judgment on the children's part. Do not dictate choice. The object is to develop the personal power of seeing color relationships. The use of color names should be postponed till special colors are taken up for detailed study.

Study of Special Colors. Let children find all the objects they can which have color like that of their red tablets. Have the name red clearly understood and memorized. Use red tablets in making ornamental arrangements, rosettes and borders. Use red papers for folding, cutting and pasting in decorative or other forms. Study orange, yellow, green, blue and violet in the same way.

Figures cut from colored papers pasted in rosettes and borders should be placed on a gray or other neutral background, not on a background of strongly contrasting color.

Have the children model in clay and make free drawings on blackboard, slate and paper, whenever this can be made helpful in language work, number work, or nature study. Encourage them to use their color knowledge also in the other lines of work. Do not criticise results except when work is thoughtless and careless. Let the main object be to develop powers of observation and thought, to accustom children to using modeling and drawing as means of expressing thought and creative imagination.

Without criticising children's work for its crude results, the teacher should keep constantly in mind that they should be given beautiful objects, as far as possible to study and draw instead of awkward, ugly ones, just as they should hear good English and see good penmanship. Powers of appreciation can be cultivated in advance of the power to do.

If possible have one or more really good pictures on the schoolroom walls. Encourage children to study good pictures, to discover what they represent and to express reasons for liking them.

[^2]FIRST GRADE.
THE WORK OF THE FIRST AND SECOND IEARS.


## SECOND GRADE.

THIRD YEAR.
Ellipsoid, ovoid, equilateral triangular prism, cone, square pyramid and vase forms observed in both models and objects. The general method of work should be similar to that outlined for the first year, the study of wholes preceding the study of parts. Modeling, drawing, tablet and stick laying and paper folding and cutting should be related to the form study as in the first year. Collections of objects resembling the types are essential to good work.

Review the study of color relationships with the help of individual sets of color tablets. Review study of individual colors. Study tints of red, orange, yellow, green, blue, and violet. Make rosettes and borders using tablets or papers in two different tones of the same color.

Encourage the collection of things whose color is being studied,papers, ribbons, pressed leaves and flowers, etc., etc. Where work in colored paper is pasted on a background, let the background be of neutral gray rather than of any strongly contrasting color.

Connect all this study of form and color as closely and naturally as possible with the other lines of school work. Encourage especially all attempts at sketching from natural objects. If a drawing is distinctly bad, try to cultivate more thoughtful observation. The trouble is most likely to be a matter of imperfect observation. Have all drawing entirely freehand, allowing no use of rulers for straight lines. The object is not to get perfect results on paper, but to train senses, mind and hand to work together.

Make an effort to have good pictures on the walls and encourage children to study and discuss them.

Encourage children to observe beautiful and appropriate forms in everyday objects, furniture, household belongings, etc. Start them in the habit of noticing how things are made and appreciating what is especially well designed as to form and color.


## SECOND GRADE.

## FOURTH YEAR.

In the fourth year of school the work in form study, color study and drawing should begin to be more definitely directed into special lines of thought and effort. Children's own drawing should be held more explicitly to practical standards of excellence. They should be given frequent opportunities to see really good examples of drawing and color, that they may have a more definite notion what to aim at.

No mechanical aids (rulers, squares, etc.) should be used until the eighth year and the use of the eraser should be as sparing as possible. Keep in mind the purpose of the work,-not to produce finished pictures or to rival the draughtsman and designer, but to awaken thought, to direct it in ways that are personally highminded and socially helpful, to cultivate feeling for beauty in both nature and in art, and to develop whatever possibilities of original creation pupils may possess.

The study from this point on should comprise three general lines of work, all related to each other and all related to the otber branches of regular school work.

Representation: the study of the appearance of form, and the making of pictorial or illustrative drawings.

Construction: the study of the facts of form and structure, and the making of views and "working drawings."

Decoration: The study of beauty of form and color in decoration; the reproduction of historic ornament and the designing of original ornament.
Pains should be taken :
1st. To make the drawing lessons thorough and systematic in themselves, so as to have genuine knowledge and skill to use in connection with other lessons.

2nd. To make this knowledge and skill thus gained as helpful as possible to the work in language, literature, arithmetic, geography, history and all departments of nature study.

The lessons in representation should give pupils gradually more and more skill in freehand pictorial drawing and give them steadily
increasing understanding and appreciation both of beauty in nature and of beanty in the best representative art as seen in high-grade illustrated magazines and books, and in drawings and paintings by artists of merit. The work should be conducted with constant reference to the best accessible art standards and art authorities ; at the same time pupils should be encouraged to put individuality into their work so far as they develop individuality. The work should appeal to and develop whatever genuine ability a pupil may have.

The lessons in construction should keep the æsthetic as well as the utilitarian aspects of industrial work clearly in mind. Pupils should be led to see the possibilities of beauty that consist in fitness, harmonions proportions and honest workmanship, even in the simplest article of every day use. They should be encouraged in the exercise of creative imagination regarding practical needs and how these can be met by industrial production.

The lessons in decoration should be of special value in improving pupils' taste in form and color, leading them to feel the difference between meaningless and awkward designs and designs that are truely appropriate and beautiful. The work should be so conducted as to be of special value in connection with pupils' study of history, geography and literature, the examples of historic ornament being studied for their origin and meaning as far as possible, besides being studied for their beauty of form and color. The exercises in original decorative design should call out whatever original ability pupils may possess, but should be so managed as to develop this ability in harmony with genuine art principles and not merely for the sake of originality. Originality in design may be artistically bad instead of good if the work as a whole is not thoughtfully directed by the teacher.

Representation.-Study of appearance of fruits, leaves and other simple natural specimens ; also study of appearance of made objects that are spherical, hemispherical or cubical. Pictorial drawings made, with special thought for expressing the beauty of form observed in each case. Increased attention paid to quality of line. A soft gray line is better than a fine, hard, wiry line for this sketching.

Construction. Models of sphere, hemisphere and cube, and objects like these models studied as to their facts. Views of the solids drawn. Surfaces developed and flat patterns drawn. Articles made in paper or cardboard from such patterns.

Observation of children directed to the special fitness of certain forms for certain kinds of uses. Connect the nature study and art study by showing how cylindrical plant stems serve the purpose of pipes and tubes, etc., etc.

Decoration. Study of simple examples of historic figures (crosses, quatrefoils, etc.,) their significance brought out whenever possible. (e. g. Egyptian zigzag border stood for the waves of the sacred river that fertilized their land, etc., etc.) Ornament drawn and reproduced by paper cutting and pasting. Study of red-violet, red-orange and yellow-orange with their tints. Arrangement of colored papers in scales according to tones.

Principles of repetition and alternation, unity, variety and stability, developed in the course of exercises on borders and rosettes.

## SECOND GRADE. <br> THE WORK OF THE FOURTH YEAR.



## THIRD GRADE.

FIFTH YEAR.
Representation.-Study of appearance of objects like cylinder and square prism. Study of vase forms, and of simple natural specimens, flowers, twigs, shells, etc. Pictorial drawings made with increasing care for beauty of proportion and for truthful expression of the foreshortening of surfaces when seen in certain positions. Leading principles of perspective taught not as arbitrary rules but as fruits of personal observation of models and objects.

Construction. View-drawing of the type models and objects like them. Development of their surfaces. Pattern making, and construction of simple cylindrical and prism-shaped articles from patterns. Forms of simple household utensils studied as to fitness to material, purpose, beauty of proportion and outline, etc. Bowls and cups designed and drawn from imagination.

Decoration. Continued study of historic ornament, dog-tooth moulding, etc. Study of leares and flowers for hints of beautiful form that can be used in new designs. Conventionalization of simple leaf and flower forms. Experimental work, modifying simple geometric figures to make new figures. Designs drawn and also cut and mounted in colored paper, yellow-green, blue-green, and blue-violet studied with their tints and arranged in scales. Papers of these colors used in making designs, combining two or three tones of one color in a design.

THIRD GRADE. THE WORK OF THE FIFTH YEAR.


## THIRD GRADE.

SIXTH YEAR.
Representation. Continued practice in sketching simple plant and animal forms, also in drawing from models and objects, with special attention to the ellipsoid, ovoid and equilateral triangular prism. Further study of foreshortening and convergence of line. Study of groups of simple objects;-how a group of objects can be made more interesting than a single object; unity, variety, contrast and respose desirable in a group. Arranging and drawing simple groups.

Construction. Study of facts of form and structure in the given models and in objects like them. Drawing of views. Drawing of patterus. Constructing articles in paper or cardboard from these patterns. Continued exercises in simple constructive design, planning and drawing views of familiar objects, with thought of fitness of form and material to the purpose in question, and with care for their beauty.

Decoration. Study of examples of historic ornament. Practice in modifying given units of decoration so as to produce pleasing variations on the original figure. Adaptation of given decorative figures for use in a specially shaped space. Conventionalization of plant forms for decorative purposes. Designs drawn, and also cut and mounted in colored paper.

Study of both tints and shades of the six leading spectrum colors. Arrangements of colored papers in five-tone scales. Combiaation of selected tones of one color in the designs studied or originated.

THIRD GRADE.
THE WORK OF THE SIXTH YEAR.


## FOURTH GRADE.

## SEVENTH YEAR.

Representation. Study of perspective continued with rectangular, cylindric and conic models and objects. Perspective studied not from memorized rules, but through thoughtful observation of how forms do appear when seen above the eye level, below the eye level, at one side, etc., etc. Study of plant-growth, and simple animal forms. Study of grouping continued. Practice in arranging and sketching groups. Study of good illustrations for hints on effective "composition" of groups.

Construction. Continuation of study of facts, drawing of views and of patterns. Combination of views to make "working-drawings." Practice in reading as well as in making workingdrawings. Drawings of two or more models combined. Continuation of work in simple constructive design, planning the making of simple articles, expressing the plan by drawings-then making the article in suitable materials.

Decoration. Study of spiral and reversed curves, in examples of historic ornament and in plant growth. Drawing of historic ornament from copies. Continued practice in conventionalization of plant forms for original decorative design. Special study of balance as a principle in decoration.

Study of six intermediate colors with both tints and shades. Arrangement of color scales of five tones each, in colored papers. Designs cut and mounted, using three tones of one color in a design.

## FOURTH YEAR.

THE WORK OF THE SEVENTH YEAR.


## FOUR'TH GRADE. <br> EIGHTH YEAR.

Representation. Rectangular, pyramidal and hexagonal models and objects studied as to appearance when turned at different angles above and below the eye-level. More difficult instances of foreshortening and convergence of line observed and expressed in freehand sketches. Drawing of groups of flowers, fruits and other natural objects continued, with increased attention to the variation of lines to express distance, shadow, and the texture and material of things. Increased study of examples of good drawing in drawing books, other books, magazines, etc.

Construction. Working-drawings of rectangular, pyramidal and hexagonal models and objects, "figured" as in ordinary shop practice. Continued practice in reading working-drawings. Workingdrawings of imaginary objects made and "figured."

Decoration. Study of historic ornament continued. Study of plant growth continued as a basis for conventionalization of plant forms for original designs,-panels, borders, etc.

Study of neutral gray, red gray (russet) orange gray (brown) and yellow gray (citrine) with their tints and shades. Arrangement of these in five-tone scales. Historic and original decorative designs cut from colored papers and mounted on appropriate backgrounds, using in any one design various tones of the same color.

FOURTH GRADE.
THE WORK OF THE EIGHTH YEAR.


## FIFTH GRADE.

## NINTH AND TENTH YEARS.

Representation. Study of appearance of form in more complicated objects. Continued study of line as expressive of distance, shade, texture, etc. Continued study of pictorial composition as it enters into the arrangement and sketching of groups of objects. Further study of natural objects. Sketching of simple buildings, trees, etc. Study of good illustrations wherever found.

Construction. The use of compasses and rulers may be begun in this grade. Solution of simple geometric problems. Application of these problems in working-drawings made to scale. Patternmaking done to scale, using instruments.

Decoration. Historic ornament further studied. Symmetry, proportion balance and rhythm studied in examples of good ornament and observed in original designs. New designs based largely on the study of plant growth.

Study of green gray, blue gray and violet gray with their tints and shades. Arrangement of five-tone scales of each color. Use of colored papers in working out decorative designs, several tones of one color being used in a single design.

FIFTH GRADE.
THE WORK OF THE NINTII AND TENTH YEARS.


THE WORK OF THE NINTH AND TENTH YEARS-Contineed.


BOOKS FOR TEACHERS.
Manuals in Drawing, Prang; First Year in Drawing, Bailey; Drawing Simplified, Chalk Marks for the Blackboard, Augsburg; Illustrative Blackboard Sketching, Hintz; Use of Models, Prang ; Normal Handbook in Drawing, Shaylor.

## MUSIC.

A course of study in music for public schools must combine theory with practice. At the beginning theory must consist of those simple facts in regard to representation which enable the pupil to begin the practice of singing by note, and in the later part of the course, the theory should consist of a simple explanation of musical effects already made familiar by practice.

As a pupil begins to talk as a first step in learning a language so he begins to sing as a preliminary step in his course in music. No pupil can really begin to study music till he can sing, but as nearly all pupils can sing a little when they enter school, it is only necessary to cultivate the power till pitch and rhythm are sufficiently established to warrant systematic work. The first step in systematic instruction consists in the presentation and mastery of the scale. The instant this is done the path is plain and the pupil proceeds step by step to the end of the course.

The various divisions and sub-divisions of the subject may be placed under ten heads: (1) Scales-(Major, Minor) ; (2) Intervals; (3) Chromatics; (4) Rhythms ; (5) Vocal drills ; (6) Part singing; (7) Dictation; (8) Songs ; (9) Modulations ; (10) Rudiments of Notation.
(1) Rote singing. (2) Scale (major) taught by rote. Practiced daily with a variety of syllables. (3) Presentation of representation of scale in various keys. (4) Practice from staff representation of scales and scale exercises. (5) Simple presentation of rhythm, half and whole notes. (6) Study of the tones of the scale in order, each tone of the scale being considered in relation to every other tone, so that every possible interval shall be considered.
(7) Application of tone and interval study in simple choral music.
(8) Vocal drills, daily, for flexibility and purity of tone.

ROTE SONGS.
(1) Study of scales continued. (2) Study of $l a$, or the sixth tone of the scale. (3) Preparation for chromatics by the study of modulations. (4) Rhythms varied and extended to include ${ }_{4}^{2},{ }_{4}^{3}, \frac{3}{8}$, 8. (5) Vocal drills. (6) Preliminary work in two parts-(very
simple．）（7）Dictation in simplest form．（8）Application of power to read in little scale songs．（9）Simple explanation of notation．
（1）Scale practice continued with occasional use of the normal minor form．（2）Interval study extended．（3）Rhythm extended to include the divided beat．（4）Chromatic tones sharp 4 and flat 7 in simple combinations．（5）Modulatory exercises advanced． （6）Singing in two parts，very simple．（7）Vocal drills－including two，three，（triplet）and four notes to the beat．（8）Simple expla－ nation of terms and signs．（\％）Songs by note．（10）Dictation continued．
（1）Scale practice continued combining and coutrasting major and minor scales in different keys，and special study of the normal minor．（2）Interval study continued and including chromatic tones．（3）Rhythms in all common varieties introducing the dotted note or uneven division of the beat．（4）Special study of chromatics already introduced．（5）Free vocal drills．（6）Sing－ ing in two parts．（7）Songs introducing practice on the new rhythms．（8）Modulations．（9）Elements of theory and musical terms．（10）Dictation．
（1）Scales major and harmonic minor．（2）Intervals of major and minor scales including chromatics．（3）Review of previous chromatics with special study of sharp 5 and flat 3 ． （4）Rhythms including the secondary division of the beat（ $\sqrt{ }$ ） in all meters．（5）Very free vocal drills．（6）Singing in two and three parts．（7）More advanced dictation including simple chromatics．（8）Application of new elements in songs for one， two，and three voices．（9）Free modulation．（10）Study of the elements of the scale．
（1）Major and minor scales，with harmonic minor．（2）Intervals studied in systematic order，including those previously introduced and all major and minor seconds．（3）Special study of chromatics in the minor scale and progressions by minor seconds．（4） Rhythms previously studied with addition of four notes to beat． （みよす）（6）Free vocal drills．（7）Dictations extended．（8） Songs for one，two and three voices．（9）Free modulations．（10） Theory of intervals．

The elements which enter into music have all been presented in the first sections of the course. In the following divisions the practice upon these elements should be continued and applied in the study of the songs of the best composers.

In the last two sections the bass clef should be introduced. In the last year the dictation should be varied and include composition of melodies by the pupils, and the setting of words to music.

BOOKS FOR TEACHERS.
The Child Voice in Singing, F. E. Howard; Voices of Children, Liebe ; Pestalozzian Music Teacher.

## GENERAL EXERCISES.

The work covered by the term "General Exercises" is designed to occupy only a few minutes each day, yet it may be made of great service in the education of the children.

If it is begun when the child enters school and is persistently and intelligently continued through the whole course, it may so round and supplement the regular work as to make it reasonably thorough and complete.

As a means of teaching correct English and enlarging the vocabulary, no better opportunity will be afforded.

Conversational lessons should form an important feature and the children may be taught to talk while at the same time they are acquiring much valuable information.

In the lowest grades the work should be of the simplest character and should seek to develop ideas of color, size, and the simple qualities of objects, such as hardness, softness, toughness, brittleness, etc.

Elementary studies of the human body and lessons on the care of the health, the skin, nails, teeth, etc., may be given with much profit.

Review constantly what has been already taught and take up new and advanced topics as rapidly as pupils are ready for them. These new lines may include common words often misspelled, more advanced study of physiology and hygiene, the evil effects of narcotics and stimulants, lessons in form, weight, size, etc.; studies in the growth and structure of plants and animals, study of minerals, drill on the sounds of vowels, diacritical marks, and words often mispronounced.

Love of country may be taught by means of patriotic songs and stories, lessons on the flag and the observation of holidays and the birthdays of distinguished men.

Current events, and items of interest cut from papers or read from periodicals may be brought in by teacher or pupils. Talks about common things and subjects of interest to pupils may occupy an occasional period.

Reciting quotations and selections learned in connection with the observance of authors' and poets' birthdays, with brief accounts of
their lives and the books or poems they have written, may help to interest the children in good literature. Geographical and historical games will often serve to awaken and sustain an interest in these studies, and facts otherwise difficult to remember may be firmly fixed by being associated with these exercises.

Rapid oral practice in mental arithmetic may occupy a few minutes in the higher grades, while in the lower, making change with toy money, the use of dominoes in forming combinations and number stories may be helpful.

Lessons on morals and manners should occupy some time each week. The conduct of children on the street, in the school yard, in public places, in the school-room, and in the home will afford abundant material for many valuable lessons.

These are but a few of the many ways in which teachers may help to make reliable boys and girls, good citizens, intelligent members of society and sturdy and healthy men and women.

## books on physiology and hygiene for puplls and teachers.

Health for Little Folks, Our Bodies and How We Live, Child's Book of Health, Child's Health Primer, Blaisdell; Lessons in Hygiene, Johonnet and Bonton; Primer of Health, Stowell ; Auatomy, Physiology and Hygiene, Tracy; How to Get Strong, Blackie.

BOOKS ON PHYSICAL CULTURE FOR TEACHERS.
Progressive Gymnastics, Days' Orders, Enebuske ; Handbook of School Gymnastics of the Swedish System, Baron Nils Posse; Light Gymnastics, Anderson; Gymnastic Cards of the Ling System, Morse ; Swedish System of Educational Gymnastics, Hasting Nissen.

## MISCELLANEOUS BOOKS FOR TEACHERS.

Kindergarten Stories and Morning Talks, Wiltse; Temperance Teachings of Science, Palmer; Primer of Ethics, Comegys; How to Teach Manners, Ethics, Dewey; How to Get Strong, Blackie ; Teaching Patriotism, Black; Ethics for Young People, Everett; Topical School-room Questions, Simpson; Queer Questions and Ready Replies, Oliphant; Morals and Manners, Gow ; Talks about Common Things, Hussey ; How Shall My Child be Taught, Obser-
vation Lessons in the Primary Schools, Hopkins; Simple Experiments, Home Made Apparatus, Woodhull; Devices, Shaw; The Place of the Story in Early Education, Wiltse; Exercises on the American Flag, Winthrop; Exercises for Arbor Day, Willis; Exercises for Washington's Birthday, Winthrop; 'Teachers' Help Manuals, Eaton and others; Lessons in Manners, Wiggin.

## HELPS FOR TEACHERS AND PUPILS.

The suggestions on reading, given below, were printed on slips and have been distributed to the teachers who were in attendance at the Summer Schools and Institutes. Provision has been made by the department to furnish the teachers of the State with as many of these documents as they can use to advantage.

It was explained that the first slip should be pasted on the inside of the front cover, and the second, on the inside of the back cover of a blank book, in which record should be made of the answers the children gave to the questions propounded.

The importance of helping children to acquire a taste for good reading is fully discussed in another section of this course.

> READING (FIRST SLIP.)
1.-Write in a blank book the complete titles of the books you read this year.
2.-Write a short sketch of the author of each book read.
3.-Mark the books that you like best with a cross.
4.-Why do you prefer these books?
5.-In what ways have they helped you?
6.-What friends did you make in the books read?
7.-Why did you select them for friends?
8.-What is the best idea in your favorite book?
9.-What is the most important fact?
10.-What is the choicest sentence?
11.-How many times have you read the books marked with crosses?
12.-Have you taken notes while reading?
13.-Have you committed to memory striking passages?
14.-Do you make some record of all the books you read?
15.-What newspapers and magazines do you read regularly?
16.-Do you put in a scrap-book the gems you read?
17.-How much time do you spend each day in reading?
18.-Do you consult reference books for information on matters you do not understand in your reading?
19.-In what ways has your reading benefited you?
20.-What books would you like to read next?

Reserve the first and second pages of the book in which you write answers to the above questions for answers to numbers $11,12,13$, $14,15,16,17,18,19$ and 20.

## READING (SECOND SLIP.)

Read but few books.
Read the best books.
Read the books that help you;most.
Read the same books many times.
Read for ideas more than facts.
Take notes while reading.
Commit to memory striking passages.
Make indexed scrap-books of gems read.
One hour of thoughtful reading each day will furnish food for meditation for all your leisure hours. Persist in this practice until it becomes a controlling habit. Read and study the lives of good men until you have discovered the secret of their goodness and greatness. Read and study the history of a nation until you appreciate the people, measure the leaders and are able to comprebend the reasons why it helped or hindered the world's progress. Read and study one of the classics until you make your own the ideas of the author, see the picture he paints, understand the characters he portrays and can think out to their legitimate conclusions the ideas expressed. Verify statements in science by observation or by experiment, if possible. Do not feel satisfied with understanding the words of the author. Master the thought, welcome the enthusiasm he inspires and follow out the ideas your reading suggests. Study and respect the opinions of others, but in the end stand by your own conclusions.

## HELPS FOR PUPILS.

There is a lamentable vagueness in the minds of teachers as to where to begin their work and what to do next. The fact that children need systematic training in certain definite things seems to be unknown to them. The card printed below was prepared for the purpose of helping to settle some of these questions.

The teachers who attended the Summer Schools and Institutes have been furnished with enough of these cards to supply each
pupil in their schools with one. They were urged to call attention to the items found on these cards, and they were asked to make a special effort to develop a personal and a school enthusiasm to excel in each of the particulars mentioned. The department is prepared to send these cards to all teachers applying for them.

Stand and sit erect.
Move promptly and quietly.
Speak distinctly and gently.
Study more than text-books.
Master what you study.
Be courteous and thoughtful.
Be diligent and trustworthy.
Make the most of the best in you.
Me., 189

Will you read or repeat what is on the opposite side of this card once each day? Will you make an earnest effort to do the things there mentioned better than you did them last term? I am sure that you will be greatly benefited if you try to improve in these several ways. I am equally certain that you will always remember with pleasure every effort you make to do more and live better than you did yesterday. These requests and suggestions are made by your superintendent,

And your teacher,

## PROFESSIONAL READING.

A large number of letters have been received by the Superintendent asking him to recommend books and papers for teachers. The following lists are submitted as a general answer to these inquiries:

BOOKS.
Theory and Practice of Teaching, Page ; Mistakes in Teaching, Hughes ; Practical Hints for Teachers, Howland; On Teaching, Calderwood; School Management, White; School Hygiene, Newsholme ; History of Education, Psychology Applied to Education, Compayre; Lectures on Teaching, Fitch; Studies in Childhood,

Sully; Studies on Education, Earle Barnes; Teaching the Lan-guage-Arts, Hinsdale.
papers and magazines.
American Teacher and Journal of Education, New England Publishing Company, Boston; Primary Education and Popular Educator, Educational Publishing Company, Boston; School Journal, Teachers' Institute and Primary School, E. L. Kellogg \& Company, New York; Educational Review, Henry Holt \& Company, New York; The Education, Kasson and Palmer, Boston; School Review, University of Chicago; Child Study Monthly, Werner Company, Chicago.

## HELPS FOR SUPERINTENDENTS.

The questions given below were prepared for the use of superintendents in visiting their schools. The following letter will explain how they are to be used, and the service which they may render teachers and pupils.

## STATE OF MAINE.

EDUCATIONAL DEPARTMENT.
Augusta, October 4, 1895.

## My Dear Sir:

I have found the enclosed list of questions useful in expressing to teachers my estimate of their work.
To use these questions to the best advantage you will need to make a careful study of the teacher, the pupils, the work and the questions. This done, you can, in a few minutes, make a record of your decisions and leave them in a form for the teacher to study at her leisure.

It is embarrassing to a teacher to have comments made on the discipline or work of the school in the presence of her pupils, although they may not hear what is said. She is frequently so much excited that she does not distinctly hear, or fully understand the suggestions made by the superintendent.

This is sufficient explanation of the fact that teachers frequently do not act on these hints; they do not hear all that is said, they do not understand what it means and they soon forget what they were urged to do.

I would suggest that you do not attempt to mark more than nine or ten questions during any one visit. If possible, mark some that indicate your approval of the work or efforts of the teacher. It is not difficult to find some points in which you think the work needs more attention. If necessary, do not hesitate to make clear the particulars in which you think the teacher fails.

Wishing you the largest success in your efforts to train the boys and girls to be worthy citizens,

I am,
Very sincerely,
W. W. STETSON, State Superintendent of Common Schools.

1. Has she the instincts and tact of a teacher?
2. Did she seem to be familiar with the work required of her classes?
3. Did she seem to have made suitable preparation for the recitation?
4. Had she some definite plan of work?
5. Did she secure the undivided attention of her pupils?
6. Did she teach more than was in the text-book?
7. Did she use the facts and objects with which the children were familiar to emphasize the essential points of the lesson, and to illustrate principles studied?
8. Were her statements clear and accurate?
9. Was her manner decided?.........inspiring? ......controlling?..... .. forceful?
10. Did her questions follow each other in a logical order?
11. Was her method of questioning effective?
12. Did she lead the children to discover their errors?
13. Did the work done seem to promise the best results?
14. Were her explanations suited to the abilities and advancement of her pupils?
15. Were the important points of the lesson fully developed, and carefully summarized at the close of the recitation?
16. Did her teaching tend to make thinkers or machines?
17. Were the pupils taught how to draw conclusions from facts learned?
18. Did her questions include the answers desired?
19. Did she suggest by words or tones the answers required?
20. Did she assist her pupils to such an extent as to make them depend. ent upon her?
21. Did they answer questions with the rising inflection?
22. Were they allowed to guess at answers?
23. Did their answers take the form of questions?
24. Did the teacher seem to be governed by the idea that it was her principal business to hear recitations?
25. Did she stimulate her pupils to think by asking suggestive questions?
26. Did she encourage helpful discussions?
27. Did she thoroughly verify and test the pupils' ideas of the statements made and the definitions given?
28. Did her questions show an intelligent and ample grasp of the topic?
29. Did the pupils thoroughly prepare their lessons before coming to the recitation?
30. Did she have suitable work prepared and assigned to those who were not reciting?
31. Were those who were not reciting studying?
32. Were all the members of the class giving attention to the work of the recitation?
33. Was her instruction interesting enough to deserve attention?
34. Did she "clinch" some point during the recitation?
35. Did she make the recitation accomplish all it was capable of doing for her pupils?
36. Did she use effectively the facts that are naturally tributary to the lesson?
37. Did she, to a reasonable extent, go back to the first principles of work being done?
38. Were oral reviews a part of the regular exercises of the school?
39. Did theylinclude only the essential facts and principles studied?

Answers
40. Did she use anniversaries, facts, incidents, and current events to illustrate and'simplify the work of the text-books?
41. Can her pupils:apply, in a practical way, what they learn from books?
42. Does she devise and adapt her methods, select the facts she teaches, and arrange the materials she uses?
43. Is her work in these particulars characterized by good taste and sound judgement?
44. Did her pupils know how to think?
45. Did she have drill exercises in the pronunciation of words?
46. Did her pupils use good English?.... are they skillful talkers?
47. Do they know what they should about the soil of this section?...... plants?.......rocks?. ......animals?........about their town?........ county? .... state?.....about famous men?.. ..great and current events?
48. Were inaccuracies in oral and written language corrected?
49. Were important points frequently reviewed?
50. In reviews, were the questions so worded as to require the pupils to think, and use their own words in their answers?
51. Were her questions brief and searching?
52. Were her recitations so conducted as to develop thought?
53. Did she dispatch the details of her work expeditiously and quietly?
54. Did she secure promptness, accuracy, and brevity in her recitations?
55. Were the tones of the teacher and pupils natural and pleasant?
56. Were her pupils respectful and courteous?
57. Did they seem to make progress in their studies?
58. Was the teacher too talkative?
59. Did it seem as if the teacher questioned only the brighter pupils?
60. Did the teacher address her questions to the whole class?
61. Did she indulge in repeating the pupil's answer?
62. Did she say or do anything which the pupils might have said or done themselves?
63. Were they urged to prepare simple apparatus to illustrate principles studied?
64. Were they energetic, self-reliant, and progressive?
65. Did they stand, sit, and walk properly?
66. In her intercourse with her pupils, was she careful in her manner, tone and words?
67. Did her pupils give parrot-like or intelligent analyses in arithmetic?
68. Did they analyze the problems or state the processes used in the work?
69. Were fractions so taught that they were readily used in interest and percentage?
70. Were the pupils rapid and accurate in mental work in arithmetic?
71. Did she try to teach the cause and relation of facts studied?
72. Did she possess the power that comes from serenity?
73. Did she ignore faults and irregularities?
74. Was the class quiet?......diligent?
75. Was the order in passing to recitations in the lines, and in handling books and apparatus, satisfactory?
76. Was the teacher just in praising? ......reprimanding?
77. Did she have control of herself?
78. Was order maintained by harsh measures?
79. Was she kind and firm in her treatment of her pupils?
80. Did she rule by muscle?......by will power?.......by inspiring self control?
81. Did the discipline of the school influence the pupils helpfully out- Answers. side of the schoolroom?
82. Was the moral atmosphere of the school wholesome?.......mental?
83. Were the relations existing between the teacher and pupils kindly and intimate?
84. Did the pupils obey promptly?...... cheerfully?
85. What was the temperature?......atmosphere?
86. Was the schoolroom tidy and attractive?
87. Was the work on the board and slates neatly done and arranged?
88. Were the pupils allowed to injure the text-books or other school property?
s9. Were they alert and interested?
90. Did she infuse life and energy into the pupils and the work of the school?
91. Did she seem to be buried in her text-book?
32. Did she bring some new idea into each recitation?
93. Did she encourage her pupils to read the books, papers, and magazines found at home and in the school?
94. Did she test their knowledge of what they had read?
95. Did the pupils read with good expression?
96. Did they speak in clear, distinct tones, and in a prompt and decided manner?
97. Were they allowed to read without comment or suggestion?
98. Was the amount of text read too much?
99. Was there enough time spent in studying the thought of the selection read?
100. Were the pupils required to reread a paragraph until they read it acceptably?
101. Were mistakes in pronounciation and emphasis left uncorrected?
102. Were mumbling, drawling, slurring tones permitted?
103. Did the pupils recite words or ideas?
104. Did the teaching tend to develop the power of concentration? .......memory?.... attention?.......application?
105. Did it tend to develon the power to see things in all their parts and relations?......to grasp and analyze ideas?
106. Did the younger pupils recite frequently enough?
107. Did she have some definite object to accomplish by each lesson?
108. Did she have some definite way of accomplishing it?
109. Did her pupils master the work attempted, and state clearly their ideas?
110. Were their answers indefinite or incomplete?
111. Did they use the words and sentences that expressed in the brief. est and clearest manner the correct answers?
112. Did they understand the words used?
113. Were they required to work?
114. Were the pupils told to do or taught how to do the work required of them?
115. Are the pupils' vocabularies large and well selected?
116. In the assignment of lessons did the teacher indicate that she had made a study of the abilities and needs of her pupils and of the text assigned?
117. Has she a special line of study or investigation not directly connected with her school work?
118. Has she read some of the standard works on education?..... in general literature?
119. Does she read regularly an educational magazine?
120. Is she instinctively a student?
121. Is her knowledge of the "common English branches" broad and accurate?
122. Is she energetic?......enthusiastic?..... progressive?
123. Can she devise?..... execute?
124. Is she up with the times in thought?.......reading?
125. Is she interested in her work?......in her pupils as individuals?
126. Does she inspire her pupils and exert an influence for good over them because of the quality of her personality?
127. Is she interested in the best interests of the community?
128. Did she spend much time on non-essentials?
129. Did she economize the time and energy of her pupils, by properly grouping the facts that should be considered together?
130. Did she put her best effort into teaching the important topics?
131. Was the work on the chart satisfactory?.......in oral combinations in number?.... general exercises?......reviews?.......synonyms?.... phonics?.......analysis of words?
132. Could the pupils give the reason why the statements they made are true?
133. Was the recitation a means of making their information more definite and extensive?
134. Did they study about things, or study the things themselves?
135. Was each lesson so taught as to justify the teacher in feeling that something had been accomplished, something done?
136. Did she use her own and her pupils' time and energies to the best advantage?
137. Did her influence and teaching tend to make pupils thoughtful? ...... considerate? ..... gentle? .. ... generous? .......erect and graceful in carriage?......courteous in manner?.......unselfish ......trustworthy?
138. Did she appeal to the best motives in her efforts to control or influence her pupils?
139. Did she have the power of holding them to their work and good bebavior without a visible effort?
140. Did her teaching tend to develop the best qualities and abilities of her pupils?
141. Are they doing more and better work than they did last term?
142. Did she have the faculty of inducing them to voluntarily put forth their best efforts?
143. Does she familiarize herself with what her pupils have done in preceding classes?
144. Does she know and properly appreciate what they are to do in the higher classes?
145. Is her work a continuation of what precedes, and does it best prepare the pupils for what follows?
146. Did she use good English?
147. Did her sentences clearly express her ideas?
148. Were the pupils impressed and influenced by what she said?
149. Do they dawdle?
150. Does he teaching tend to help them to use their faculties naturally, and at the time of their greatest natural activity?
151. Could they see things with their intellectual eyes?
152. Could they use books and facts, or were they burdened by them?
153. Did they do enough in a given time?
154. Did she have the faculty of inducing her pupils to work out the solutions of questions for themselves?
155. Was enough time spent on drill exercises?
156. Did she "pump" the lesson out of her pupils by using leading ques. tions?

[^3] Answers.

REMARES.

## LIST'S OF PUBLISHERS AND DEALERS IN SCHOOL SUPPLIES.

So many calls have been received at this office for the names of firms who publish text-books and furnish supplies for teachers, that it has been thought best to give alphabetical lists of these companies. If school officials and teachers are in need of books or helps, it is suggested that they look over the lists, write one or more of these firms, stating their needs, and asking for catalogues or circulars. Orders for books or materials should be given on condition that they may be returned if they are not found satisfactory.

It is also suggested that superintendents and teachers would do well to consult their local dealers, as they will, in a majority of cases, be able to purchase books and supplies on terms quite as favorable as those given by the publishers themselves.

The lists are given, primarily, for the assistance of those who are not within easy reach of dealers in these appliances.

## PUBLISHERS OF TEXT-BOOKS.

American Book Co., Boston; D. Appleton \& Co., New York City; E. H. Butler \& Co., New York City; Ginn \& Co., Boston; D. C. Heath \& Co., Boston; Harper \& Bros., New York City ; Henry Holt \& Co., New York City ; Houghton, Mifflin \& Co., Boston ; Leach, Shewell \& Sanborn, Boston; Lee \& Sheperd, Boston; Longmano Green \& Co., New York City; Macmillan \& Co., New York City; Maynard, Merrill \& Co., New York City; G. B. Putman's Sons, New York City; Charles Scribner's Sons, New York City; Sheldon \& Co., New York City; Silver, Burdette \& Co., Boston; Thompson, Brown \& Co., Boston; The Prang Educational Co., Boston; The Werner Co., Boston; University Publishing Co., New York City.

## TEACHERS' HELPS AND SUPPLIES.

Local Dealers; C. W. Bardeen, Syracuse, N. Y.; Educational Publishing Co., Boston; J. L. Hammett Co., Boston; E. L. Kellogg \& Co., New York City ; D. H. Knowlton \& Co., Farmington, Me.; Milton Bradley Co., Springfield, Mass.; New England Publishing Co., Boston.

ART.
Local Dealers; Alinori \& Cook, Corso 137 A., Rome, Italy; Berlin Photographic Co., New York City; Curtis \& Cameron, Boston; P. P. Caproni \& Co., Boston; C. H. Dunton \& Co., Boston; English Photographic Co., 15 Stadion St., Athens, Greece; Charles Naya, Place S. Mark, N. 75-79, Venice, Italy; W. H. Pierce \& Co., Boston; Soule Photograph Co., Boston; G. Sommer \& Figleo, Sargo, Vittoria, Palazzo Sommer, Naples, Italy; The Prang Educational Co., Boston.

The Curator of Agriculture, Washington, D. C., will send teachers, on application, valuable specimens for illustrating work in nature studies. This material is furnished without expense to the teachers.

## APPENDIX-II.

## COURSE OF STUDY FOR RURAL AND VILLAGE HIGH SCHOOLS.

Teachers and school officers who use this Course of Study will find many valuable suggestions on the work in English in the papers read before the Cumberland County Teachers' Association at its anuual meeting in 1895 , several of which papers are reproduced in the succeeding pages of this Course.

Able discussions of this and other subjects taught in high schools will be found in the report of the Committee of Ten of the National Educational Association. The volume for 1895 of the Association of Colleges in the Middle States and Maryland also contains valuable reports in civics, history and English. Every high school teacher should make a thorough study of these documents.

The most of the children in the public schools do no expect to enter college. This large majority should receive the best fitting for life's work that the public schools can give them. They need the training and information that can be gained from history, language, science and mathematics. The English course in our Free High Schools should have the ripest scholarship, the ablest teaching talent and the strongest personality in the teaching force of the school. Our institutions are not only based on the principle that majorities shall rule, but that they shall be served. English, mathematics, history and the sciences must be so broadly and inspiringly taught that the boys and girls studying them in our high schools will be made strong to make the good things in life better.

## ENGLISH COURSE.

|  | First Term. | Second Term. | Third Term. |
| :---: | :---: | :---: | :---: |
|  | Elementary Rhetoric and Composition, Physiology, Arithmetic. | Elementary Rhetoric and Composition, <br> Physiology and Botany. <br> Arithmetic and <br> Zoölogy. | Elementary Rhetoric and Composition, Botany, Zoölogy. |
|  | Literature and English History, Chemistry, Algebra. | Literature and English History, Chemistry, Algebra. | Literature and German History, Chemistry, Algebra. |
| $\begin{aligned} & \text { 気荡 } \\ & \text { Hix } \end{aligned}$ | Literature, English Gram. and Analysis, Physics, Geometry. | Literature, English Gram. and Analysis, Physics, Geometry. | Literature, English Gram. and Analysis, French History, Geometry. |
|  | Literature and Rhetoric, Roman History, Civics, <br> Physical Geography. | Literature and Rhetoric, Greek History, Civics and Psychology, Mineralogy. | Psychology, Geology, <br> Review Arithmetic, Geography and United States History |

COLLEGE PREPARATORY COURSE.

|  | First Term. | Second Term. | Third Term. |
| :---: | :---: | :---: | :---: |
|  | Elementary Rhetoxic and Composition. 3 . Latin. 4. French. 4. Arithmetic. 3. | Elementary Rhetoric and Composition. 3 . Latin. 4. <br> French. 4. <br> Arithmetic and Botany. 3. | Elementary Rhetoric and Composition. 3 . Latin. 4. French. 4. Botany. 3. |
|  | Literature. 3. <br> Latin. 4. <br> Greek. 4. <br> Algebra. 4. | Literature. 3. <br> Latin. 4. <br> Greek. 4. <br> Algebra. 4. | Literature. 3. <br> Latin. 4. <br> Greek. 4. <br> Algebra. 4. |
| $\begin{aligned} & \text { تं } \\ & \text { B } \\ & \text { B } \\ & \text { in } \end{aligned}$ | Literature, English Gram.and Analysis. 3 . Latin. 4. Greek. 4. Geometry. 4. | Literature, English Gram.and Analysis. 3. Latin. 4. Greek. 4. Geometry. 4. | Literature, English Gram.and Analysis. 3. Latin. 4. Greek. 4. Geometry. 4. |
|  | Literature and <br> Rhetoric, 3. <br> Latin. 4. <br> Greek. 4. <br> Review Arithmetic, Geography and United States History. | Literature and Rhetoric. 3. <br> Latin. 4. <br> Greek. 4. <br> Review Algebra. | Literature and <br> Rhetoric, 3. <br> Latin, 4. <br> Greek. 4. <br> Review Geometry. |

Pupils should have the privilege of electing additional work in modern languages and the sciences in place of Greek during the second, third and fourth years of the College Preparatory Course, if they desire to do so.

The figures at the right of each subject indicate the number of recitations which should be provided for in each subject during each week.

Instruction in composition should be made a part of the work in rhetoric, grammar and literature.

There should be one recitation in spelling each week throughout the Course. Arrangements should be made for rhetoricals each week, and the classes should be divided into four divisions, so that each pupil will have a part in the exercises once each month.

Roman History, Latin Prose Composition and Ancient Geography should be taught in connection with the regular work in Latin during the third year. Greek History and Prose Composition and Ancient Geography should be taught in connection with the regular work in Greek during the fourth year.

It is fair to suppose that nearly all who take the English course will receive no further academic training; their school days will end with the high school. In the case of these students no one will be likely to say that too much attention is paid to the study of English grammar, composition and literature.

In the case of the students who are going to college, it may be thought that more time is assigned to the study of English than is necessary. It may be urged that literature and rhetoric are to be studied more exhaustively and more profitably in the college than in the high school. It is true that almost every college affords its students an opportunity to do more or less work in English; but owing to the great number of elective courses it frequently happens that students graduate from college without having studied English literature at all. It makes no difference whether a boy is going to college or not, the sooner he learns to love good books, and learns how to read good books, the better.

College officers enter vigorous complaints concerning the faulty English of the students who come to them. It is stated that hardly one entrance examination paper in five is free from ridiculous errors in spelling, punctuation and grammatical construction. No matter whether a boy is going to college or not, he needs careful and con-
stant drill in English composition-not for one or two terms only, but for every term of the high school course. And the study of literature should occupy some part of almost every term of the course, because the student who is trying to learn to write, needs to have good models always before him.

In these two high school courses considerable time is assigned to English grammar and to abalysis and parsing. It is hoped that this study will not be the dull and tiresome memorizing of rules and exceptions, but an intelligent examination of the principles that obtain in correct English speech. It has been purposely assigned to the third year of the course, to a time when the student has become somewhat familiar with the grammar of other languages. Analysis and parsing are placed in the third year, though it is believed that some work in English analysis should be done every term throughout the course, and that there should be Latin and Greek analysis as well. There is nothing equal to analysis for imparting to the student a sense of proper grammatical form and construction.

In the College Preparatory Course the work in literature is quite definitely limited by the college requirements. Almost any one of the books on the list for any given year, with collateral reading, will occupy a term. The reading would be fruitful of topics for discussion, and would furnish abundant material for essays.

The aim of the teacher in English in the College Preparatory Course is not to put his pupils through a large number of books, but rather to make them feel the force and the beauty of a few of the best selections from our literature.

If the student acquire a love for good literature before he goes to college, he will be likely to choose some of the optional courses in literature that are offered him there. A boy is very pororly fitted for college if he have not a love for good literature. And, again, throughout the course, the strongest emphasis should be laid on the work in English Composition.

In the English Course the state of things is somewhat different. The students in this course have not before them the prospect of new opportunities for study; so the teacher should not only make the students thoroughly familiar with a few masterpieces, but should try to give them some idea of the vastness of our literature, and introduce them to as many as possible of its makers.

## ENGLISH.

## BOOKS FOR PUPILS.

Golden Legend, Longfellow ; Marble Faun, Hawthorne; Tales from Chaucer in Prose, Clarke; Tales of Shakespeare, Lamb; Merchant of Venice, Shakespeare; Sir Roger de Coverly, Addison; Last Days of Pompeii, Lytton; Old Curiosity Shop, Dickens; Primer of English Literature, Brooke; Golden Treasury of Songs and Lyrics, Palgrave; First Steps in English Literature, Gilman; Grammar Land, Nesbitt; Tom Brown's School Days, Hughes.

## BOOKS FOR TEACIERS.

Teaching the Language-Arts, Hinsdale; Study of American Literature, 'Brander Matthews; Study of British and American Authors, Blaisdell; On Teaching English, Bain; English in Preparatory Schools, Huffcutt; The Study of Literature, Morley; English Literature Teaching, Bowen; Method of English, Gow; English in Schools. How to Teach Shakespeare, Hudson; The Study of English Literature, Collins; The Aims of Literary Study, Corson; Introduction to Theme Writing, Fletcher; On the Correlation of Studies in Elementary Education, Harris; Lectures on Language and Linguistic Methods in the School, Laurie; Books and Libraries, Lowell; Plain Principles of Prose Composition, Minto; A Practical Course in English Composition, Newcomer; Paragraph Writing, Scott and Denney; Literature in the Public Schools, Scudder; Philosophy of Style, Spencer; Essentials of English Grammar for the Use of Schools, Whitney; English in the Schools, Woodward.

## MODERN LANGUAGES.

 BOOKS FOR PUPILS.Adventures of Telemachus, Fénelon; Don Quixote, Cervantes; Stories from the Italian Poets, Hunt; Book of Songs, Heme; Schiller's Wilhelm Tell, Coleridge; Primer of German Literature, Sisatsburg ; La Fontaine's Fables, Wright.

BOOKS FOR TEACHERS.
The Art of Teaching and Studying Languages, Gouin; On Teaching Modern Languages, Colbeck; Modern Languages in Education, Comfort; Teaching of Languages in Schools, Widgery ; Methods of Teaching Modern Languages, Heath.

## ancien't Languages.

BOOKS FOR PUPILS.
Stories from Homer, Church; Stories from Virgil, Church; Day in Ancient Rome, Shumway; Plutarch's Lives, Clough; Herodotus for Boys and Girls, White; Stories from Livy, Church; Our Young Folks' Josephus, Walsh.

BOOKS FOR TEACHERS.
Art of Reading Latin and How to Teach it, Hale ; Language and the Linguistic Method, Laurie; Aims and Methods of Classical Study, Hale ; Method of Classical Study, Taylor ; Study of Latin in the Preparatory Course, Morris.

AR'T.
BOOKS FOR PUPILS.
The Lion of St. Mark's, Henley; Stones of Venice, Ruskin; Wonders of Sculpture, Viardot; Score of Famous Composers, Dole; Essay on Art, Palgrave ; A. B. C. of Gothic Architecture, Parker ; Sacred and Legendary Art, Jameson; Four Masters of Etching, Wedmore.

BOOKS FOR TEACHERS.
Art Education and Social Life, Walter Crane ; Art Teaching and Understanding, Taylor; Place of Art in Education, Davidson; How to Judge a Picture, Van Dyke.

## HISTORY. <br> BOOKS FOR PCPILS.

Magna Charta Stories, Gilman; Charicles, Becker; Hypatia, Kingsley; Noble Dames of Ancient Story, Edgar ; American Citizen, Dole; Old South Leaflets, Mead; Historic Boys, Brook; Franklin's Autobiography; Biographical Stories, Hawthorne ; George Washington, Scudder ; Last of the Mohicans, Cooper ; Man Withont a Conntry, Hale; Log School House on the Columbia, Butterworth.

## BOOKS FOR TEACHERS.

Studies in the Historical Methods, Mary Sheldon Barnes; Methods of Historical Study, Adams; How to Study and Teach Mistory, Hinsdale; Methods of Mistorical Study, Freeman ; Meaning of History, Harrison; Methods of Teaching and Studying IIistory, Hall ; Seminary Method of Original Study, Foster.

## SCIENCE.

BOOKS FOR PUPLLS.
Starland, Ball; According to Season, Dana; Life of a Butterfly, Scudder; Chapters on Ants, Treat; New England Bird Life, Stearns; Man Wonderful and House Beautiful, Allen; Natural History of Selborne, White; Wonders of the Shore, Kingsley; Beauties of Nature, Lubbock; Story of the Hills, Hutchinson; Life of a Tree, Coulta; History of a Mouthful of Bread, Mace; Coal and Coal Mines, Greene ; Century of Electricity, Mendenhall; Birds 'Through an Opera Glass, Merriam.

## BOOKS FOR TEACIIERS.

Teaching of Geology, Shaler ; Biological 'Teaching in the Colleges of the United States, Campbell; Aims and Methods of Teaching Physics, Wead; Culture Demanded by Modern Life, Youman; How to Teach Chemistry, Frankland; Teaching of Chemistry and Physics in the United States, Clarke; Methods in Zoölogy, Manton.

## MATHEMATICS.

BOOKS FOR PUPILS.
Any standard series of mathematical text-books.

BOOKS FOR TEACHERS.
Mathematical Teaching and its Modern Methods, Safford; Teaching and History of Mathematics, Cajori; Number and its Algebra, Lefeure ; Philosophy of Arithmetic, Brooks; Psychology of Number, McClellan \& Dewey.

For other books in the various studies, see Report of Committee of Ten.

## ENGLISH IN THE HIGH SCHOOL.

For detailed suggestions for teaching English the teachers are referred to the papers which are found on the following pages.

These papers were read before the Cumberland County Teachers' Association at its annual meeting in 1895. They are so rich in suggestions and sound in methods that the Superintendent feels that he is doing the teachers of the State a great service by reproducing them in this report.

> A. J. ROBERT'S, A. M.,
> Professor of English Literature and Rhetoric, Colby University.

The aim of the teacher of English literature is not to make his pupils widely familiar with names and dates pertaining to books and writers. The aim of the teacher of English literature is not to insist that his pupils shall read a certain number of books-as for example the half dozen on which candidates for admission to New England colleges must be examined. English literature is not a disciplinary study in the same sense that geometry and algebra are disciplinary studies.

The aim of the teacher of English literature is to get his pupils to love good books, so that when they get out of school they will care for something besides the daily papers, and will not care at all for the New York Ledger.

Having stated the object of the study of English literature, I want to mention some of the necessary qualifications of the teacher.

In the first place, he must be an appreciative reader of the best prose and the best poetry. Not only must he be able to enter into the mind of the author he is reading, and so follow the author's train of thought, but he must have a keen sense of style-that subtle something which in any sort of composition is the stamp of value.

He must be able to read aloud well ; and by reading aloud well, I mean reading intelligently and with expression. He must read as if he understood and as if he felt. The teacher ought every day to give his class an appreciative rendering of a few lines of poetry or of a bit of prose.

And he must have read a good deal. He must be saturated through and through with the English classics, -with Shakespeare and Milton and the Bible, with Lord Bacon, with Addison and Swift and Johnson. I will not say he should have read much of Wordsworth and Tennyson and Browning, and Longfellow and Whittier and Lowell, and Macaulay and Newman and Matthew Arnold, and Thackeray and Dickens and Holmes and Hawthorne and Washington Irving-for that goes without saying.

Again, the teacher of English literature must not be a stick. He must be alive. He must be full of contagious enthusiasm. It is of supreme importance that the study of English literature shall be made interesting, that it shall never become dull and dry and dead. If pupils do not enjoy their work, do not look forward with pleasure to the recitation hour, and do not have a good time when it comes, they are getting but little good of the study of English literature, and may be getting a great deal of harm. I know a man who says he hates Milton to this day because an early school master made reading Milton so tremendonsly wearisome.

The teacher of English literature should know when to keep silence and when to speak. He should not always be trying to cram his opinions down the intellectual throats of his pupiis. He should encourage them to think for themselves. Instead of telling his pupils what lines of poetry and what passages of prose he thinks are best, he should try to find out what lines of poetry and what passages of prose they think are best. I should not like to travel through the White Mountain region with a voluble fellow for a guide who would always be pointing out the things I ought to admire and then insisting that I should admire them. A good many of us teachers are so charmed with the sound of our own woices, that we want to do all the talking. We forget that very often the really important thing in teaching is not to tell what we know, but to find out what our pupils know.

Having spoken of the aim in the study of English literature, and of some of the qualifications of the teacher, I want now to speak of methods of study, (of work?) and, first, let us consider the study of biography.

It is the custom in a good many schools to send the pupils to the encyclopedia for information about the life of the author they are going to study. And the biographical sketches the boys and girls
prepare from the material found there make pretty tiresome reading. They tell when the author was born, when he was married, when he died; they mention the names of some of the books he wrote, and that is about all. It is not so much wonder that the sketches are tiresome, for it is a rare thing that an encyclopedia makes one acquainted with a flesh and blood man. The man has become a name. The heart and the brain and the warm, rich life are lacking. The encyclopedia is a valley of dry bones.

Then, too, the biographical sketches that appear in the English classics that the various publishing houses are issuing, are very often worse than useless. For the most part they are written by men who seem to have no conception of the actual needs of boys and girls in the high schools. Some of these sketches seem like lectures that may have been given before college classes, and perhaps given with profitable results ; others seem to be essays calculated--like Artemas Wards jocund and discursive preamble-to show what a good education the writer has. Not long ago a leading publishing house sent me a series of English classics for examination. The publishers hoped I wonld be able to recommend the series to the principals of our fittting schools. The first book I examined was "Burke on Conciliation," and I want to quote a sentence or two from the so-called introduction: "Perhaps the crossness of their pericrania rendered them impervions to the infiltration of new ideas" and "this jar shook to its foundations the loosely cohering Whig party, and awoke from its coma the coipus wite of that court policy which all good men hoped had passed into a state of cadaveric rigidity." Now the man who wrote what I have just quoted, certainly was not writing for boys and girls in the high school.

Instead of sending the pupils to the encyclopedia or asking them to read the frothy essay some ambitions college tutor has succeeded in selling a publishing house, let the teacher himself tell his class the story of the life of the man they are going to study. Here is the place for lecturing. The teacher is better fitted than anybody else to introduce his class to an author. He knows what things in the life of an author will appeal to the class and what things will not. IIe knows where to elaborate, and where to abridge. And if the teacher would make the story interesting let him not omit the little things: how the man looked, bow he dressed, what were his recreations, who were his friends, whether he was rich or poor.

Boswell's Life of Johnson is the best biography ever written, because it is full of things trivial enough in themselves, yet of the sort that tell us just what kind of human being $\operatorname{Dr}$. Samuel Johnson was.

Then there are some things about the lives of most authors that better not be told. I don't see how it can help the young student to know that Burns and Charles Lamb were often in their cups and that Edgar Allan Poe died in the gutter ; or to be familiar with the facts about the domestic infelicities of Shelley and of Lord Byron: Knowledge of this sort may do a vast amount of harm. Only a little while ago, a woman told me that since she had read the story of the life of George Eliot, she had ceased to care for George Eliot's novels. It is certain that Carlyle's influence in the world has waned a good deal since the publication of the Froude memorials. Many a genius seems to have been a Doctor Jekyll and a Mr. Hyde, and I think it is quite as well to keep the Mr. Hyde hid. Tell children the truth, but not always all the truth.

What author shall the class in English literature read first? is a question of great importance. A good many teachers begin at the beginning. They take Chaucer first, and then Spenser, and then Shakespeare and Lord Bacon, and then Milton, and then Dryden, and then Pope, and so on. This habit of slavishly following the chronological order in which writers lived is responsible for most of the distaste pupils feel for the study of English literature. A boy doesn't care anything about Chancer or Spenser, and by the time he reaches somebody in whom he would naturally be interested, he has made up his mind that the study of literature is a pretty tiresome business; and when a boy decides that a study is tiresome, it is pretty hard work to get him to change his decision. Any road leads to the end of the world, and any book leads out into all literature. Begin with somebody in whom the class are likely to be interested. If Huckleberry Finn attracts and Paradise Lost repels, I should say Huckleberry Finn is a better book to begin with than is Paradise Lost.

I do not know any good reason for studying men in the order in which they lived and wrote. If your class are reading Milton's Lycidas, why should they wait half a year before reading Shelley's Adonais? or three quarters of a year before reading Matthew Arnold's Thyrsis? Milton and Shelley and Arnold are linked together by
the bond of grief, and the centuries cannot separate them. Geniuses do not grow out of each other. Each new writer is not the heir of the last. There is no order of succession in literature. Men who live at the same time do not think the same things. Thomas Carlyle stood nearer to the Prophet Jeremiah than he did to John Stuart Mill or Lord Macaulay. Pope stood nearer to Horace than he did to Shakespeare, though separated from Horace by sixteen centuries, and from Shakespeare by hardly four generations. Men who lived at the same time and were intimate friends, talking with one another, writing to one another, influencing one another in countless ways, may profitably be studied together. Each of the men who belonged to the Mermaid Club-Shakespeare and Ben Johnson and Beaumont and Fletcher-is a more interesting personality on account of his relations with all the others. Samuel Johnson, Edmund Burke, Oliver Goldsmith, Sir Joshua Reynolds and James Boswell-that best of biographers,-form a group every member of which is more interesting to us because of his illustrious friendships. The Lake poets, Wordsworth and Coleridge and Southerly, were neighbors.

Shelley and Keats and Byron are bound together by warmest friendship and closest companionship. The Brook Farm Experiment forms a center around which one groups a good many makers of literature.

But there are other ties than those of friendship and association that bind men together. If your class are studying Browning and learn that he was strongly influenced by shelley, it is a good time to read Shelley to see what kind of a poet it was that influenced Browning. Or if your class are studying Shelley and learn that he was strongly influenced by Spenser, it is a good time to read Spenser to see what kind of poetry it was that influenced Shelley.

Men who wrote about the same subjects may profitably be read together. If your class are reading Addison's Sir Roger De Corerly papers, it is a good time to begin reading Irving's Bracebridge Hall, for both describe the home life of an Eoglish squire.

And I don't like the plan of fencing off groups of writers by any artificial classification. For example: in many minds American literature and English literature are entirely different and distinct from each other, and are not to be studied together. I know a school board so patriotic that it insists on more time being given to

American literature than to English literature. And there are not lacking those who appland such literary jingoism. As a matter of fact, English literature includes American literature. Every man who writes the English language is making his contribution to English literature, no matter whether he is writing in England or Scotland or Australia or Canada or America. There is no sectionalism in literature. Shakespeare belongs to everybody who reads English ; and so, too, do Longfellow and Oliver Wendell Holmes. Indeed, the best literature has no local flavor; it is for all men, everywhere and always. As James Russell Lowell so well says, it is no literature that loses its meaning when out of sight of the steeple of the parish church. A moment ago I spoke of reading Addison and Irving together; one would be seriously handicapped if one were obliged to keep them apart.

Carlyle and Emerson are not to be separated by the Atlantic: they are held together by mutual sympathy and admiration, and by more than thirty years of correspondence. They wrote about the same subjects. Carlyle's "Heroes and Hero Worship," and Emerson's "Representative Men," are parallel studies in the lives of great men. Again and again we find Carlyle and Emerson looking at the same things, each with his own eyes. Does the fact that one man lived in England and the other in America furnish any reason why they should not be read together?

Having spoken of the study of biography and of the order in which authors should be read, I want to speak of the possibilities of cultivating literary taste and developing literary judgment in young students. Suppose you write on the blackboard these lines from Southey:

> "Faint gleams the evening radiance through the sky, The sober twilight dimly darkens round, In short, quick circles the shrill bat fits by, And the slow vapour curls along the ground."

And the first stanza of Gray's Elegy :
"The curfew tolls the knell of parting day, The lowing herd winds slowly o'er the lea, The plowman homeward plods his weary way, And leaves the world to darkness and to me."
Go over each passage, line by line, with the class, never once telling them what you think, but all the time trying to get them to tell what they think. Question them : how many of you ever saw the bat fly in short, sharp circles? and why should the bat be called the
shrill bat? how many of you ever saw the slow vapour curling along the ground? Which is the more impressive line "The sober twilight dimly darkens round," or "And leaves the world to darkness and to me?" Which is the best line in the passage from Gray? in the passage from Southey? In which passage are movement and rhythm better suited to a description of the dying day and the gathering darkness? A half hour spent in the manner I have indicated on these eight lines of poetry will teach pupils a good deal about literary criticism. Wordsworth's three sonnets on Sleep, and Shakespeare's Apostrophe to Sleep in Macbetb, and Keats' in Endymion, lend themselves very readily to this sort of study. Among longer parallel pieces of composition are the Odes to a Skylark by Wordsworth and Shelley ; Leigh Hunt's poem "The Glove and the Lion," and Browning's "The Glove;" and Carlyle's review of Croker's edition of Boswell's Johnson and Macaulay's review of the same edition. When a boy is able to tell you why he likes one piece of literature better than he does another he is getting on famously.

Having spoken of some of the things to do, I want to speak of some things not to do. The teacher of English literature should be careful not to ask his pupils to read that for which they are not ready. I have seen college students dive into Sartor Resartus and come up gasping, with no courage left for another plunge. Sartor Resartus is a book that is to be read with profit only after one has lived a while in the world, and read a good deal and thought a good deal. If your class are going to study Carlyle, they would better read the essay on Burns and the Essay on Scott and parts of "Heroes and Hero Worship." Sartor Resartus and "Past and Present" and the Latter Day Pamphlets are books for the future.

If your class are going to study Browning you would better steer them clear of Sordello and Paracelsus and Child Roland to the Dark Tower Came and ever so many others, and read the comparatively simple lyric and narrative poems, like Prospice and Porphyria's Lover and The Flight of the Duchess and the Pied Piper of Hamelin. It is very easy work to give a really intelligent pupil the impression that Browning is a mass of unintelligibility. When the pupil gets through studying Browning he should have the feeling that Browning isn't so very hard reading after all, and then he will want to go back to Browning sometime. And when he goes back he will carry a maturer mind and a keener insight to the task of reading what is really difficult.

If your class are going to study Emerson you would better not ask them to read the essays on Spiritual Laws and on The Over-souls, or the lectures on The Method of Nature, or The Transcendentalist. Ask them to read the essays on Clubs and on Works and Days and on Farming, and parts of English Traits. If pupils don't understand and don't enjoy what they read, if for example they see in Emerson and Carlyle and Browning nothing but words, they are getting only harm from such reading, and perhaps incalculable harm. My friend who hates Milton was asked to read Milton too soon. Not all literature is milk for babes.

Again the teacher should be careful not to ask his pupils to read anything which by ite very length is discouraging. If your class are going to study Wordsworth they would better read Lucy Gray and Micael and some of the Sonnets, and the Ode on the Intimation of Immortality, rather than attempt to read very much of the longwinded and somewhat tedious Excursion.

It is not best for pupils to read all that an author has written, be it ever so interesting. A good time to stop is when the pupil is hungry for more. We want our pupils in after life to be eager to continue the study of literature which we helped them to begin in school. I want to repeat with all the emphasis I can command that the study of literature is not for the petty present, but for the larger future; it is not for boys and girls but for men and women.

I want to bring this paper to a close with a description of a teaching exercise in English literature. Mr. R. is the teacher and has a class of five, Thomas and Richard and Henry, Mary and Martha. Mr. R. selects Charles Lamb as the first author his class shall study. The first day, Mr. R. tells them the story of Charles Lamb's life. He describes the most interesting circumstances of Charles Lamb's childhood. He tells of the years the boy spent in Christ's Hospital, that curious old school where so many great men received their earliest education, and he does not forget to describe the methods of teaching employed by that rare old schoolmaster, Rev. Matthew Boyer, whom Leigh Hunt and Coleridge so comically described. Mr. R. tells his class what sort of looking man Charles Lamb was, and how shy he was and how be stammered. He tells of the care Charles Lamb took of his old father and mother, and of his devotion to his sister Mary. He tells of the years Charles

Lamb spent in the India House, and of the kind of work he had to do there. In short he tries to make his class as well acquainted with Charles Lamb as they are with their next door neighbors.

Then Mr. R. says, "Thomas you may read Lamb's Dissertation on Roast Pig. Tell us to-morrow whether you like the essay or not, and why you like it or don't like it. Be prepared to read to the class the passages you like best, and the passages, too, you like least.

Richard you may read the essay on the Superannuated Man, which describes Lamb's life in the India House.

Henry you may read the essay entitled Christ's Hospital.
Mary you may read the essays "My Relations," and "Mackery End in Hertfordshire."

In these essays James Elia and Bridget Elia stand for Charles Lamb's brother John and sister Mary, and it is really they about whom he is writing.

Martha, you may read as many of Lamb's Letters as you can.
The next day the class have a good time talking over what they have been reading. Mr. R. asks a great many questions, but he doesn't do much other talking. At the end of the half hour Mr. R. assigns them work for the next day, and from what the class have been saying, he knows about what each one would better do.

Perhaps he asks Martha to prepare an essay on the kind of man Charles Lamb's letters show him to have been. Perhaps he asks Mary to prepare an essay on John and Mary Lamb as they appear in "My Relations" and "Mackery End in Hertfordshire." Perhaps he asks Thomas to read the essay Richard read last time and Richard to read the one Henry read and Henry the one Thomas read, and each must be ready next day to tell in what respects he agrees with the opinions which have already been expressed upon the essay, and in what respects he disagrees. Mr. R. isn't in any great hurry to set the boys to writing; he wants to set them to thinking and talking first. And so Mr. R. guides his class in the study of Charles Lamb until he thinks they would better go to studying somebody else. In reading Charles Lamb the class have become acquainted with Coleridge, who was Lamb's schoolmate and dearest friend, so Mr. R. introduces his class to the author of the Ancient Mariner.

And here we will leave them.

## Miss CHARlotte a. W. TOWLE, <br> Teacher in Deering High School.

I am trying to help a large class in Casar to understand what he meant by some of his back-handed expressions, with more than forty other pupils in the same room, who are supposed to be studying; who at least ought to be studying. Presently I notice a boy who evidently is leaving undone the thing he ought to do. As a reminder to him of his duty, I say "John, how is it about your examples in algebra that are due the next period?" Promptly comes the answer, "I done 'em all to home but them two on page fifty-four." I ask him to tell me again what he did at home. Perhaps he consciously substitutes my "did" for his "done," possibly he makes the statement precisely as he did the first time. In either case I filch two precious minutes from the Cæsar class to give John, and all who will receive it, a special lesson in English.

In conducting recitations in Latin there is always an excellent opportunity to give instruction in English, not alone in construction, but in the choice of words as well. I try never to lose sight of this opportunity. In preparing their Latin lessons, if new words occur, for the meaning of which they must consult the dictionary, I entreat my pupils to look at all the definitions given of the word, and then to discriminate in their choice of one. I often have two or three members of the class write upon the board the translation of the preceding day's lesson, paying as little regard as possible to the Latin forms, but taking special care to give the exact meaning of the text in the best English forms they can use. I have found this exercise profitable. But good expression in English implies more than mere grammatical correctness. The best expression of the best thought makes ideal language. This is found in the best literature. Is there a more effective way of helping our pupils to acquire both correctness and grace of expression than by kindling in them a love for the English classics, that may be in the hands of every one of them? This I constantly try to do with my pupils, collectively and individually, if haply some may come not only to like the best, but also to know why it is the best. If you ask me how I do this I can give no definite answer, for I do it in no definite way.

Duty reading is very dry and uninteresting. Here as elsewhere "the letter killeth, but the spirit maketh alive." So I sometimes assign to an entire class a poem, or an essay to read, not as a task that must be done, but as pleasurable employment for a leisure hour, asking them to tell me after their reading what thought, or what passage interested them most, and why it interested them most. The differing reports of the different pupils have been of profit to their teacher to say the least. Again, to a group of boys and girls around my desk, I suggest various books, the reading of which I am sure would prove both pleasant and profitable to them; books that will excite some intellectual curiosity, and that cannot be wholly taken in without some mental effort.

And in various other unstudied and untellable ways I try to awaken in my pupils a love for good literature. They unconsciously absorb so much from the companionship of a book, that it seems to me of vital importance that the book shall be worthy.

And so I think the teacher who can and does present the English classics to his pupils in a way that clutches their hearts as well as their heads, does as veritable missionary work as he who goes to Timbuctoo with hymn books in his hand.

## Miss C. N. POTTER, Teacher in Brunswick High School.

Our course in English extends through the four years, with part of the time three and part of the time four recitations a week.

The first year the pupils take Lockwood's "Lessons in English" with supplementary reading of Snowbound, Evangeline and the Wonder Book, beside frequent written work.

During the tirst weeks the third class have been studying Marmion and Ivanhoe, and now we are engaged with King Arthur and the Knights of the Round Table. This class happens to be very young and the kind of work we do is quite elementary.

We have for a lesson a chapter in Ivanhoe, perbaps. They read it carefully, and look up the meanings of all words they do not understand. When they come into the class-room, sometimes we read the chapter aloud in turn; sometimes I question them upon their understanding of it, either by asking the meanings of words, or by having the story told consecutively; or, if the lesson is
poetry the most common figures of speech that occur in the passage are taken up. I have tried having them make an outline of a portion, but find them hardly equal to that. We have talked together incidentally of the customs, manners, houses and dress of the time, of Richard the Lion-Hearted, of the Crusades, and of the Saxons and the Normans and their languages, for one of my aims is to show them that history and literature cannot be separated. And if you have ever asked your pupils in literature a question on the history of the period, you will agree with me that their aim seems to be to keep those subjects as far apart as possible.

In studying King Arthur they have had no books, but I have read them selections from the stories and they have taken notes, reading from them next day in class. We have also read "The Lady of Shalott," Sir Galahad and selections from the Idyls of the King, and committed passages to memory.

The second class have been studying with interest Macaulay's essays on Milton and Addison, and are now reading the De Coverley papers. This class is older, and I can pursue a somewhat different method with them. Sometimes we study the text by topics assigned to different members of the class, or pick out the figures of speech and explain them; again, we make outlines of different portions, or study the rhetorical variety of the sentences and the structure of the paragraphs. Sometimes the words themselves claim our attention, and once in a while we have a sentence analyzed. Whatever the scholars know of Macaulay's style, they have found out for themselves, and I wish I had time to read you some of the opinions they have expressed on the subject; perhaps I may be permitted to quote two.

This is from the youngest mind in the class: 'I like Macaulay's writings because he uses plain language and expresses his thoughts clearly. He uses many figures of speech, which help to make his writings plain. His descriptions of Milton and Addison are very good, the one on Addison I think is better; perhaps why I think so, is because I like the character of Addison better than that of Milton." Another says: "I like the writings of Macaulay very much. They consist of such a variety of words, sentences, figures of speech, and thoughts that they are never monotonous. His descriptions are very vivid, and he knows and clearly understands his subject before undertaking it. Macaulay writes in a grand
style, very smooth and even much is taught one in a single composition."

One day I gave them as a lesson, a comparison of the essays on Milton and Addison, and I will quote from one:-"Macaulay in writing about Milton tells more about his writings than about the man himself, while in writing about Addison he lets the reader know just what kind of a man he was, and about his writings also. We find by reading the two essays that Milton's works were of a more solemn and religious form than those of Addison, his being mostly humorous. In the essay on Addison the author clings more to his subject than in the one on Milton. He does not take up so many different subjects to make the principal one plain. Milton, like Addison, wrote both poetry and prose. He led a solitary life, while Addison was in the height of society. Milton was a lover of nature, but Addison cared more for the coffee-houses, theaters, etc. They both lived in exciting periods of English history. Summing up both essays, we find Milton to be a man of gentle nature, not caring for worldly places, but loving his own society best, and his writings correspond to himself. But Addison was just the opposite. He was more worldly, and his writings generally took the humorous side of everything."

The first class has divided its time between Genung's Rhetoric and a study of Milton. In rhetoric they have been studying the unity and structure of sentences and paragraphs and the requisites of composition work; making outlines of essays or filling up outlines given them, some written work forming a part of every lesson, and I am often surprised by the excellence of what they do. I asked them the other day to write me how they liked Milton's writings and give their reasons, and as deference is always paid to any expression of their opinion, I feel quite sure of getting frank answers, and I will give two that pleased me especially.

The first is from a boy who has been necessarily absent part of the term: "I do not think 1 am old enough to understand the real beauty which his writings in poetry are said to have. I have not read enough to form any opinion. I have not read any of his prose writings and have only heard part of his greatest work, 'Paradise Lost.' I have read Comus, but not very understandingly, and shall read it again. I think the only way that I would appreciate him to any considerable extent would be through essays
on him. I have read only one essay, by Macaulay, and I think I see his greatness more than I did before." And this, from a girl : "I like Milton very much. I like him because I never read any writings of his style before, and because his works are so deep that it takes time to digest them, thus giving time for reflection; also he so words his works as to please the fancy and draw on the imagination. I do not think anyone would care to read his style very extensively, but it is a delightful recreation to study his works."

One day's exercise was a composition on "The Misfortunes and the Blessings of Milton," and here are three sentences from three different essays.
(1) 'Milton, like many other men of genius, died in poverty, and they buried his body in the church-yard, but his works will live as long as the sun continues to rise and set."
(2) "Milton though poor, obscure and persecuted raised for himself the most enduring kind of a monument-a monument in the minds of men."
(3) "Although the misfortunes of Milton were many and were hard to endure, I think his blessings were more and would be counted as greater."

I do not quote from the answers of my pupils because I think them in any degree remarkable, but simply because it seems to me the best way of showing what they are doing, and whether or not they are learning to express themselves in fairly good English.

One day I read to one of my classes, the third, Matthew Arnold's poem, "The Forsaken Merman ;" then I told them to go out into the hall and write out what they could remember of the story. Among the exercises handed in was the following composition, which I selected, because I think it contains remarkably well the spirit of the poem. The poetry quoted was given from memory, and is, as can be seen, not exactly correct:

## THE FORSAKEN MERMAN.

"A merman and his children sat on the shore. Come, my children, said the merman, let us go down below. Hark! my brothers are calling for me and the great winds are blowing, and I must hasten down below, come my children.

Call for your mother, my children, call in a loud voice, and surely she will hear you and come to us again. We will look once more
at the little town with its great white walls, and at the little church, gray and still, and then we must go down.

As we lay in the caverns, yesterday, we heard the sound of a far off bell. Yesterday she was with us when we heard the sound of the bell, I must go up, she said, and pray or I shall lose my soul, merman, here with thee. I told her to go and then come back, she went but has not returned. The sea grew stormy and we went up through the bay and through the town to the little church where she was. I told her to come back, but she did not hear, for her eyes were fixed on the holy book. In the town she is spinning and every now and then she looks towards the sea, the tears spring to her eyes and her heart is filled with sorrow. To-night, my children, we will go quietly up where we can see the town, and come back singing,

> 'There lives a loved one, But cruel was she And alone left forever The kings of the sea.'"

## Miss C. E. Robinson. <br> Teacher in South Portland High School.

My class last year made a careful study of Longfellow's Tales of a Wayside Inn and selections from Hawthorne, prominent among which we placed "The Great Stone Face." For composition work abstracts and paraphrases of these were made, while at the same time we were reading good English and becoming acquained with two of our American masters.

No pupil who is not interested in Martha Hiltou and "fair Almira," Elizabeth and Emma, King Robert and Torquemada, Rabbi Ben Levi and Azrael. the Baron and The Monk has read to much purpose.

I have found that many of Hawthorne's works are not too difficult for young pupils to study and appreciate. His "Mosses" and "Tales" are admirably suited for reproduction, and besides lead the reader to question with regard to his meaning and purpose. I think it is always best to respect the opinion of the pupil in matters of mere opinion. If an idea seems to be wholly wrong, with true Yankee spirit we can often change that which was half a question by asking another of our own.

Of course other work was done in the study of rhetoric during these two terms, but I speak of this especially as introductory to our course in literature.

Here, first, our thousand-souled Shakespeare claimed our attention. The metaphorical style, the deep philosophy, the peculiar words, the seemingly peculiar uses of very common words,-in short, the breadth of thought and conciseness of expression,-all tend, at first, to puzzle the student.

I am not sorry that this is so; for this very feeling of being baffled will develop later, if rightly directed, into admiration and respect.

The Merchant of Venice, generous and courteous, Bassanio, soldier and scholar, Gratiano, good natured if rude, Shylock, human and inhuman, Portia, womanly and wise, Nerissa, clever and imitative, Jessica, impulsive and lovable,_-are all associated with our first study of the great English bard.

I think the reading of this play peculiarly helpful in that the expression is usually new to the pupil and also in that we should study the uniqueness thoronghly enough to recognize it in other Shakespearian plays.

Therefore, I say to myself, hasten slowly ; otherwise your class, if asked what it was reading, might reply with Hamlet, but with less method, "Words, words, words."

After a scene has been read I have usually asked for its oral reproduction, and have encouraged pupils to weave into their own expression the language of the play. I have thought that by so doing more of the style of the writer was acquired, and that the pages were read much more carefully. It is well, I think, to ask for some entire acts to be given in a connected manner after they have been studied in the class. As an illustration, I can say that many of my pupils have been able to talk for thirty minutes upon "The Trial Scene."

In order to see if the class have what is called by Kellogg perfect possession of what is read, I often commence a sentence calling upon some one to finish it and to tell by whom it was spoken and on what occasion. We have often found it profitable to make lists of epithets, compound adjectives and words changed in pronunciation for metrical purposes. Pupils will readily observe that the same adjective is often accented according to its position before or after the noun. Dr. Rolfe says that there are few
persons who can read a page of Shakespeare correctly, and that some attention ought to be given to this. If it is necessary to pronounce the syllable "tion" as two syllables, for the sake of the poetry it should be done.

Passages showing the estimation in which one character is held by another, we have learned; any other passage, valuable for its thought and embracing a universal truth, we have always quoted. The speeches of Morocco, Aragon, Bassanio and Portia are sufficient to mention as examples. I am confident that my pupils, as a whole, have thought that the possession of these paid for the time expended upon them.

One great benefit to be derived from the study of any good writing is a greater appreciation of all good writing. I do not think a pupil can be trained in this direction by reading a page once and hastily. Not until a thought has become a part of ourselves do we fully comprehend and admire it.

Well do I remember my old reading books! Where again shall I find anything more beautiful than "The Child's Dream of a Star?" Where for me can there be oratory as forcible and sublime as Hayne's South During the Revolution, Webster's Liberty and Union, that celebrated masterpiece delivered before the Virginia Convention, and Lord Chatham on the American War? Where can the dramatic appeal to me so strongly as in "Richelieu" and "Rienzi," Cassius against Cæsar, Antony's oration, Hamlet's soliloquy, and I do you as people of Portland and of Maine great honor by completing this list with "Spartacus to the Gladiators." These are the property of each of us and we love them.

After five or six weeks we were obliged to bid farewell to our pleasant friends, for they wished "to satisfy themselves of the events at full" and would withdraw. So we journeyed on to Rome, and fell in with Julius Cæsar at a most interesting time in his career.

Here the plan of acquiring a "perfect possession" was carried on. We learned, among numerous short selections, the famous soliloquies, Brutus' harangue and Antony's oration, basing our estimate of the characters upon what they themselves said of each other, while quite often "Honor was the subject of our story." This work extended through the spring term, and, when the last page was reached, we said with Octavins,

When we met again in the fall one very enthusiastic senior said, "I cannot get enough of Shakespeare," and thus we continued with Macbeth. Here we noted the seeming paradoxes-a distinguishing feature of the play-learned many a truth, and debated from time to time upon the respective courage and weakness, blame and innocence of Lady Macbeth and her very obedient lord, always proving a statement by the play itself.

I found the boys of the class wide awake upon a subject of this kind. I have been greatly amused, and, I do not hesitate to say in all seriousness, greatly benefited by these discussions of my pupils.

This play with Hamlet occupied the fall term. The Prince of Denmark is a deep problem for any one, and I was glad to learn last summer while studying the play under Dr. Rolfe that one ought to change his opinion about it at least once in ten years.

I must not omit to mention that all classical allusions are spoken of by us. The pupils who have not studied Latin thus get into the spirit of the old mythology. It is a good review exercise to see how many of these can be mentioned and placed after a number have been discovered.

After the first play has been read I have found it pleasant to call attention to similarities and differences in thought and expression.

For example, we have Donalbain saying, "There's daggers in men's smiles." Hamlet says, "Meet it is I set it down that one may smile and smile and be a villian."

Lady Macbeth says, "To beguile the time, look like the time." Brutus says, in speaking of conspiracy, "Hide thy monstrous visage in smiles and affability."

Hamlet fears the "something after death." Macbeth thinks "if this might be the be-all and the end-all-here, he'd jump the life to come."

The question which is open now for discussion in my present class is Shakespeare's treatment of conscience. These examples are only a few of the many which might be mentioned.

In the winter our reading was more varied, including selections from Irving, Whittier, Lowell, Longfellow. While studying these I have always appointed outside reading, and asked different pupils for descriptions. I dignified these talks with the name of lectures,
and soon it began to be quite the thing to speak of lectures on Miles Standish, Rip Van Winkle, Sleeply Hollow, Evangeline, Snowbound, Sir Launfal, Launching of the Ship, Hanging of the Crane, and Morituri Salutamus.

While studying Longfellow and Whittier we used Kennedy's Life of each, and different pupils prepared talks from these. I have always thought it best to give the life of the author a secondary place, or to speak of him in connection with our reading. I believe that the teacher by well chosen anecdotes can give her pupils a better idea of the author than can be obtained from an ordinary text-book. I have always found boys and girls fully as much interested in such material as in the date of the man's birth and the name of his wife.

The class of which I speak elected literature for the spring term and our principal iistened to this request. The boys were anxious to read "The Lady of the Lake," and as it is well to heed their wishes half of the time, we took a trip to Scotland, and began to talk of harebells and copsewood, chieftians and clans, bugle-calls and muster places, bonnets and Lincoln green. We had never studied the humorous to any extent, and this I thought would also be profitable. One day a pupil said to me, "I cannot get interested in 'The Autocrat.'" Now I think there is food for thought in "The Autocrat," and when I considered the matter I knew that this was the trouble, for surely no pupil was ever more appreciative of humor.

I took the hint and began to read selections from it. I can see now the faces of '95, and can safely say there was no lack of attention. Soon after I asked the same pupil what he thought of the "The Autocrat," and he owned to enjoying it in the class.

Happiness likes company sometimes as well as misery. We can but briefly notice any one writer, but I think it is our duty as teachers to introduce our pupils to as many of our choice friends as possible, endeavoring to present them in such a favorable light that they will continue the acquaintance when we are no longer with them.

I have read sketches from Dickens, and before the session was over the book had been taken from the library, while others were calling for it. One girl told me that she read "Twelfth Night" in vacation, two others read "Othello," another from a different class
read "Barnaby Rudge" which had been spoken of while studying Julius Cæsar in connection with the attitude of a mad populace. Isaac and Rebecca in Ivanhoe were mentioned while talking about Skylock and Jessica. Some were acquainted with them, others I am certain wished to be. Thus much more ought to be accomplished than simply class-work. If only a few adopt our suggestions the time spent in making them has not been wasted.

I think we should recommend many books, and judge of the results of our recommendations, not by how many read any special one, but by how many read any of them.

What is the object of the study of literature? I turn the leaves of a much-perused book, and my eye rests upon this sentiment:

> "The nobility of labor, The long pedigree of toil."

Again I turn, and this time I read:
"How many thousands of care-encumbered men, Each bearing his burden of sorrow, Have crossed that bridge since then."
Once more at random :

> "O fear not in a world like this, And thou shalt know ere long, Know how sublime a thing it is To suffer and be strong."

Humanity, humanity on every page. We would have in our pupils a broad sympathy with human struggle and endurance, and I know of no better way for them to gain this than by thinking with one who had it.

I take another volume, and hear I see:
"Up, and tread beneath your feet Every cord by party spun, Freedom asks your common aid, Up, to Faneuil Hall."
Again :
"No fetters in the Bay State! No slave upon her land!"
On another page:
"God bless New Hampshire! from her granite peaks
Once more the voice of Stark and Langdon speaks.
Look upward to those northern mountains cold, Flaunted by Freedom's victor-flag unrolled, Be firm, be true;
What one brave state has done can ye not also do?"
We wish to plant and nourish within our pupils a noble patriotism, and I know of no better way to do this than by bringing them into contact with a patriotic mind.

I chose another poet, and he tells me to "go out under the open sky and list to nature's teachings."

Here I read of the water fowl, the apple tree, the yellow violet, the fringed gentian, and the death of the flowers.

We would have our pupils lovers of nature, and I know of no better way for some to get into touch with nature, and thus ascend to nature's God, than first to be taught by the poet.

## BOOKS AND READING.

Rev. C. S. Patton, Auburn.
I am sometimes asked the question, What shall I read? I am very seldom able to give a direct and immediate answer, such as will be helpful to the person who has asked it. I know what I ought to read easily enongh, but what you would enjoy or profit by is another question.

Yet, in a general way, the question can be answered, not by way of advice, but by way of suggestion, in*such a manner as to be profitable. I am willing to try to give you such an answer to-day.

To a man who loves books, a preliminary question occurs: Why is it that there are not more people who read? There are even a good many professional men, such as teachers and preachers, who do not read much. I, myself, do not think much of the popular excuses. People will tell you that they would be glad to read, but they have no time. But I notice that we all find time for those things that we specially delight in. Aud it is in evidence that many of my acquaintances who can find no time for reading can find plenty of time for dancing. Moreover, I think, as a rule, the great readers are not the people who have a great deal of time hanging on their hands. They are the busy people, such, for instance, as Mr. Gladstoue.

Certainly, the want of money need not keep any one from reading in these days. There is scarcely anything else so cheap as literature. And, with the exception of books just issued from the press for the first time, the best are the cheapest. The standard authors, poets, novelists, and historians, can be bought for very little. One can, of course, expend any amount of money in the collection of rare books and fancy editions; but a fancy edition does not read
any better than a common one, and in general, a rare book is a useless book. Nor does one need to own all the books he reads. Some books one can read as well out of libraries-books which are to be read hastily-but books which are to be studied, re-read and marked, one ought to own. And even in the case of such books, a little money can be made to go a good ways, by doing as one man of my acquaintance does. He buys such new books as he wants, keeps them as long as he thinks be is likely to care to use them, then, sends them to a second-hand book dealer in Boston, gets what he can for them, and puts the money into more new books. In this way, he tells me he is able to keep on hand all the new books that he wants, which he could not otherwise do, and, at the same time, he is relieved of the trouble of carrying around with him when he moves, a lot of books which are no longer anything, but so much lumber to him. The day ought to be here, and I think with cultivated people it is here, when a man is judged not by the number of unused volumes that stand on the shelves to gather the dust, but by what he has got out of his books; and when he bas got the meat out, I do not see why he should not get what he can for the husks. At any rate, in these days, lack of funds can never account for people's not reading.

Why is it, then, that more people do not read? I believe the chief answer to this question is the simple one which applies as well to the question, why do not more people smoke or eat olives. It is not because they cannot. It is simply because they have not learned. They have not formed the habit. For reading is a habit, just as much as going to bed at 10 o'clock or parting your hair on the left side. Some-men have it ; some men have not. I think of one man, now, into whose office I occasionally go. He is a busy man ; but I always notice a book on his desk. Sometimes it is a volume of history; sometimes a volume of essays; sometimes a novel. He has the reading habit. Any one who has it will find some opportunity to read, and it is for the lack of it that most people so far fail to read.

Now, from my point of view, all things considered, there is no other amusement, recreation or resource in all the world comparable for a moment to the habit of reading. It is more valuable than money. It is better than political honor. I know not what is to be compared to it. Books are the teachers who are always at hand, whose tempers never fail, whose discipline is a
delight, and whose school is never dismissed. "He that loveth a good book," says Isaac Barrow, '"will never want a faithful friend, a wholesome counselor, a cheerful companion, an effectual comforter." "A collection of books," says Carlyle, " is a University." Macaulay is said to have refused invitations to breakfasts and dinners innumerable that he might be at home with Sterne, or Fielding, or Boswell. Gibbon declared that he would not exchange the love of reading for all the treasures of India. "I love to lose myself," says that gentlest and most catholic of readers, Charles Lamb, "I love to lose myself in other men's minds. When I am not walking, I am reading. I have no repugnancies. I can read anything which I call a book. I bless my stars for a taste so catholic, so unexcluding." "Much as I love company," said Pope, "and I have kept a good deal of good company in my day, I love reading better." "Blessings be upon the head of Cadmus, or the Phenicians, or whoever else it was," says Carlyle in characteristic fashion, "that first invented books." So say I, exactly. Blessed is everv man who loves a good book and knows how to read one; and the first and fundamental thing in the art is to form the reading habit.

But, supposing one to have the habit, he must read something. What shall he read?

I am not distressed, as some seem to be, by the multiplicity of books in these days, as if in the maze one were apt to go astray and get hopelessly lost. The more the merrier. say I. There cannot be books of any more various shades than there are men of the same to write them and to read them.
'There are plenty, however, who take an opposite view. Among others, Frederick Harrison has an essay entitled "The Choice of Books," which perhaps some of you would enjoy reading, in which he mourns with great sorrow the multiplicity of books, and regrets with exceeding bitterness the way in which most of us, unsophisticated travelers, wander aimlessly through the fogy fields of literature. But I will warrant the man who follows conscientiously his own taste, to walk straighter and come out safer than the man who follows Mr. Harrison's directions. There is also an excellent book, with a broader spirit, written by that wise and good man, ex-President Porter of Yale, entitled "Books and Reading." But the best things on this topic of what to read are usually to be
found in less pretentious forms. Take, for instance, the two little essays by Sir John Lubbock, in his "Pleasures of Life," entitled respectively, "A Song of Books," and "The Choice of Books," both excellent; or the delightful essay of Charles Lamb, entitled "Detached Thoughts on Books and Reading ;" the second essay in Ruskin's "Sesame and Lilies," entitled "The King's Treasures," or some characteristic remarks of Emerson in his volume "Solitude and Society;" or a few words of Prof. Drummond, entitled "A Talk on Books." Of all these and many others, I confess that I get the most pleasure from Lamb's "Detached Thoughts on Books and Reading."

Having taken the fundamental position that any one is to read what at the time he wants to read, or what he will most enjoy and therefore most profit by, what more is there to be said to the question what shall I read? Evidently upon this foundation only a loose structure can be built. Still, even allowing every man to follow his own taste there are some general things which can further be said with profit.

First, no man ought to read narrowly. In these days, the educated man has often been defined as the man who knows a good deal about some one thing, and a littJe about a great many things. To know the little about the great many things is only second in importance to knowing the great deal about some one thing. History is good, but a man would better not read all history. Poetry is good, but I would not read all poetry. Science is good, but it is not all there is. Biography is good, but a little of it, as the boys say, goes a good ways. Read something of everything. There is no excuse for a man's being narrow in his reading.

But it does not follow that one must be reading everything at the same time. For several years, one will naturally be chiefly occupied with fiction, for instance, or with history; later, with poetry, or with science. It is not necessary to be everywhere at once, but before you get through, be sure you go pretty well round the lot. Every one ought sooner or later to read not only some fiction, and poetry, and history, for every one who reads at all already reads something in all these, but he ought to read some science, and some theology, and some philosophy, as well. Many people restrict their range of reading unnecessarily, because they think there are certain things which they cannot read. For instance, the average business man, or perhaps even the average
teacher, is frightened by the name of science or philosophy. But the scare is wholly unnecessary. To every man whose mind is of average brightness, and who has any power of mental application, the field of science or philosophy is just as open as the field of fiction. If only you get hold of the right books with which to begin you will find these things not at all remote, but cordial, easy of access, and friendly as can be. In philosophy, for instance, take such an essay as that by Mr. Huxley, on Hume. In natural science, take such a book as White's "Natural History of Selbourne," or Lubbock's "Ants, Bees and Wasps;" in science, Darwin's "Origin of Species ;" and you will be charmed and interested at once. Suffer, then, this word of exhortation; do not be frightened out of whole acres of pasturage because you are afraid your mental digestion is not go d enough to stand it. Go in, help yourself, it is all free. If you get at it right, it is all easy. I repeat, before you get through, try to read a little something of everything.

Of course, it goes without saying, that one is not to read ali books alike. You will doubtless all recall the famous saying of Bacon's, apropos of this matter. In as much as I do not recall it, I will improvise something akin to it. Some books are to be looked at, perhaps, only on the outside; some are to be read, in part; perhaps the greatest number are to be so read. Some are to be read through but not re read. Some few are to be read carefully and re-read "weighed, pondered and inwardly digested." It is said that Daniel Webster in reading most books, read first the table of contents, then read carefully the first sentence, and occasionally the second, in every paragraph. There is high art in knowing how to get what you want out of a book without having to carry off a great deal which you do not want. And do not fail to observe that to read hastily those many books which ought so to be read is only second in importance to reading carefully those few which deserve a careful reading. But as to this, as well as to all the rest, what you will do depends primarily upon your own ability and your own tastes. Some great scholars have been men of few books which they read often and most thoroughly. But Carlyle, for instance, devoured books by the thousand.

As to proportion, how much of this and how much of that, only this can be said, not so much of any one thing as to exclude entirely
something else equally valuable; not so much newspaper as to crowd out books altogether; not so much fiction as to unfit you for a little theology; not so much science as to dry you up.

As to the proportion between the new and the old, more can be said. In fiction and poetry, as a rule, one would better read that which is true and approved. In history, both new and old, but chiefly what has been written within the present century. In science and theology, almost wholly that which is recent. It is not nearly so difficult as is sometime supposed to keep up with the new books if only in your selections you give proper scope to the method of exclusion.

But how shall one tell what new books to buy, supposing he is inclined to buy any; especially if he lives away from great public libraries, and where the book stores keep chiefly newspapers and bric-a-brac? Watch the book reviews. Be it observed, howerer, that a book review is much like a letter. It is not worth much if it is anonymous. There are, for instance, twenty or thirty people scattered about the country who are writing book reviews for the Outlook. Every reputable paper is supposed to vouch for the character and the good judgment of those who write its boko reviews ; but which one of the twenty or thirty reviewers wrote the review of this particular book I have no means of knowing; and unless I know, how much more valuable is the book review to me than if I should see a notice posted on a tree, saying read such and such a book? Every book review in order to be valuable ought to be signed by the name of the reviewer; so that you may know how to make allowance for his individual judgment and point of view ; since the very best reason for not buying a book may be that some man whose point of view is different from your own has very highly recommended it.

It follows from the position that we have taken that lists of books to be read are not of prime importance, since every reader must judge for himself. But they are always interesting to me as showing what other men have read. The best short list which I have found is given by Sir John Lubbock, in his essay, "The Choice of Books." The list includes only one hundred books, and is made up not on the basis of his own taste, but as nearly as he could judge to suit the general taste. I will mention only a few of the most familiar books in his list. In religion, he puts the Bible
first, of course. Then "The Imitation of Christ," "Pilgrim's Progress," "Keble's Christian Year." In history, "Gibbon's Rome," "Hume's England," "Carlyle's French Revolution," and "Green's Short History of the Englisb People." In biography, "Boswell's Life of Johnson." In science, Darwin's "Origin of Species." Among lighter books, "Arabian Nights," "Robinson Crusoe," "1Don Quixote," "Vicar of Wakefield." In poetry, the usual English poets, from Shakespeare to Tennyson. Among essays those of Hume, Bacon and Emerson.

I would like now to add just a few words out of my own experience. I have at different times been reading in some line, for instance in history or fiction, so long that it has lost its interest for me. Not knowing what else to do, I have picked up a book dealing with some topic wholly new to me, and it has been almost as if a new planet had swung into the sky, and a new world had come to me to be conquered. If I could induce some of you to take up thus some topic which you have hitherto neglected, I should feel that you would excuse my thus far having said so much to so little purpose. If any of you find your appetite for reading growing dull, it is probably because you need a change of diet.

It is not necessary to agree with an author in order to read him with profit. Quite the contrary. If you agree with him, what is the use in reading him? If you differ from him, you may perhaps learn something from him. Those people who read only what they already agree with remind one of the people of whom Paul said, "They compare themselves among themselves, and measure themselves with themselves, and are not wise;" and owing to their peculiar method they do not grow any wiser. It is not the only necessary recommendation for a book that you do not agree with it. But, in general, I have found that I have got more from an author whose point of view is different from my own.

I think it ought in general to be said, especially to people who like teachers and ministers are obliged to use books more or less as mere tools, that for general purposes a book which imparts inspiration is better than a book which merely gives information. Thus, it is better to know Shakespeare and Browning than Herbert Spencer. A novel is often more profitable reading than a book of science or of philosophy.

I have known people who purposely refrained from too much reading, lest it should impair their originality. Now, as to that, I feel this way; I would rather know a few things which other men have known before me, which are true, than to know a great deal which no one else has ever thought of, but which after all is not so. Really, no man is prepared to think well for himself until he has acquainted himself with what men have thought before him.

As I have already said, lists of books are not very valuable, since what you want to read depends, according to our contention, on who you are, what you have already read, and what your aim is in reading. As a matter of curiosity, I should like to mention a dozen books, each one of which I enjoy most or get most profit out of in its own department. I will restrict myself to one book in each class.

In devotional reading, The Book of Psalms; among sermons, those of Frederick W. Robertson ; among essays, those of Emerson; in dramatic poetry, Shakespeare ; in lyric poetry, Burns ; in history, Macaulay's England; in fiction, Vanity Fair; in natural history, Lubbock's Ants, Bees and Wasps; in biography, Boswell's Life of Johnson; in practical sociology, Booth's Darkest England; in psychology, James' Briefer Course ; in evolution, Fisk's Cosmic Philosophy; Among the Lives of Christ, Ecce Homo.

But of many books there is no end, and to listen to a catalogue of them all is certainly a weariness to the flesh. Allow me to say this much more, I wish that every one read more, for many people would be kept out of a great deal of mischief if they were fond of reading. I wish every one read the best books, and I will tell you why; not simply because the best books broaden the mind as inferior books do not; not simply because they contain more information, but because they have the best influence on the character of the reader. As the best music, so the best literature is one means which God uses to bring men to higher ideals and purer lives. We need all the helps we can get to the best life. Let us not despise the belp of good books.

APPENDIX-III.

Compiled from Annual Returns of School Superintendents and Fiscal Returns of Munícipal Officers, for the Year Ending April 1, 1896.

ANDROSCOGGIN COUNTY.

| Towns. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Auburn | 3,874 | 1,929 | 1,701 | 2,046 | 1,810 | . 45 | 2,302 |  |  |  |  |  | ,944 | 32 |  | 29 |  | 1/44,000 | \$110,000 |  |  |  | , |  |
| Durham . | 330 | 184 | 160 | 189 | 159 | . 48 | 222 |  |  |  | 3 |  | 292 | 11 | 11 |  |  |  | 6,000 |  |  | 11 | 10 |  |
| East Livermore | 452 | 346 | 312 | 346 | 309 | . 68 | 879 |  |  | 11 |  |  | 224 |  |  |  |  |  | 10,000 |  |  |  | 10 |  |
| Greene | 191 | 132 174 | 105 | 183 | 107 | . 58 | 169 201 |  |  |  | 3 |  | 207 | 9 12 | [ $\begin{array}{r}8 \\ 10\end{array}$ | 8 | - | - | $\xrightarrow{2,400} 3$ | - |  | $7{ }^{7}$ | 7 8 |  |
| Lewiston | 7,987 | 2,335 | 2,043 | 2,532 | 2,039 | . 25 | 2,825 |  | 41 | 12 |  |  | ,427 | 25 | 24 | 12 | - | - | 237,700 | 4 |  | 68 | 80 |  |
| Lisbon | 1,189 | 773 | 650 | 726 | 587 | . 52 |  | 10 |  | 10 |  |  | 620 | 18 | 17 | 3 | - | - | 25,000 | 3 |  | 22 | 20 | 3 |
| Livermore | 291 | 130 | 102 | 138 | 112 | . 37 | 192 |  |  | 10 |  |  | 260 | 12 |  | - |  |  | 3,009 |  |  | 8 | 9 |  |
| Mechanic F Minot | $\begin{array}{r}339 \\ 257 \\ \hline 25\end{array}$ | 274 <br> 121 <br> 1 | ${ }_{105}^{236}$ | 264 138 | 115 | . 48 |  |  |  | 10 | 4 |  | 226 | ${ }_{7}^{4}$ | ${ }_{7}^{4}$ | 5 | - | - | 12,000 | -1 |  | ${ }_{7}^{8}$ | 7 | 3 1 |
| Poland | 399 | 292 | 247 | 299 | 246 | . 62 | 367 |  |  | 10 |  |  | 520 | 17 | 14 | 8 | - | , | 7,500 | 3 |  | 14 | 14 | 5 |
| Turner | 544 | 318 | 275 | 272 | 234 | . 46 | 361 | 9 | 4 | 9 | 4 |  | 412 | 19 | 16 | 8 | - | - | 11,000 | 2 |  | 17 | 11 | 5 |
| Webster | 12.9 <br> 327 | $\begin{array}{r}73 \\ 198 \\ \hline\end{array}$ | $\begin{array}{r}60 \\ 169 \\ \hline\end{array}$ | $\begin{array}{r}76 \\ 194 \\ \hline\end{array}$ | 61 161 | . 57 | 108 | 10 |  | 10 |  |  | 150 | 8 | $8$ | 5 |  | - | 2,800 3,500 |  | 2 | 5 | ; | $\stackrel{2}{4}$ |
|  | 16,599 | 7,279 | 6,315 | 7,530 | 6,319 | . 38 | 8,587 |  | 311 | 10 |  |  | ,929 | 192 | 1168 | 96 | 2 | \|\$4,591 | \$437,000 | 19 | $3: 3$ | 256 | 255 | 4 |

ANDROSCOGGIN COUN'TY-Concluded.

| Towns. |  |  |  |  |  |  | Notless cents inhab |  |  |  |  |  |  | $\dot{8}$ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |  | 烒 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Auburn |  | \$70 00 | \$8.57 | \$275 | \% 1,400 | \$16,000 | \$7,000 | - | \$4 13 | .002 3-10 |  |  |  |  |  |  |  |
| Durham |  | 2338 | 387 | 200 | -113 | - 1,200 | 31311 | - | 3418 3 3 | .003 3-10 | \$16,000 1,263 | \$8, 655 | \$3.5 | 24,120 2,126 | $\$ 27,121$ 2,029 | \$97 | 2401 |
| East Livermo |  | 7500 | 800 | 350 | 100 | 1,705 | 500 | - | 377 | . 0028 -10 | 1,679 | 1,043 | 299 | 3,026 | 2,688 | \%3s |  |
| Greene | 15 | 1900 | 415 | 175 | 62 | 1,060 | 29 | - | 523 | . 002 9-10 | 1,18; | 42 | 122 | 1,781 | 1,640 | 141 |  |
| Leeds... | 16 | 220 00 | 485 | 150 | 96 | 800 | - | - | 276 | .002 4-10 | 1, 850 | 708 | ${ }^{6}$ | 1,574 | 1,709 | 1 | 19.5 |
| Lewiston | $\stackrel{8}{2}$ | 12060 | 679 | 350 | 1,700 | 21,400 | 4,040 | - | ${ }_{2} 6$ 6s. | . $0015-10$ | 21,400 | 20, 16s | 177 | 41,745 | 41,816 | - | 71 |
| Lisbon.. | 20 | fis 00 | 650 | 200 | 300 | 3,850 | 1,354 | - | 324 | .002 | 3, $\times 50$ | 2,840 | 345 | 7,035 | 6,7,99 | 236 |  |
| Livermore |  | - | 500 | 156 | 82 | 1,200 | 279 | - | 412 | .002 4-10 | 1,608 | 723 | 74 | 2,405 | 2,160 | 305 |  |
| Mechanic Fall |  | 72 40 40 0 | 600 <br> 380 | 325 | 115 | 2,429 | 1,44: | - | $86: 3$ | . 003 2-10 | 3,021 | 959 | - | 3,980 | 3,995 |  | 1.5 |
| Mino |  | 40, 00 | 382 | $\bigcirc 00$ | ${ }_{6}^{60}$ | 800 | 456 | - | 311 | . 0022 4-10 | 1,195 | (i) 1 | 74 | 1, $\times, 43$ | 1,740 | $14!$ |  |
| Poland | 20 | ${ }^{25} 5093$ | $4{ }^{6}$ | 240 | 219 | 2,501 | 523 | - | (\% 27 | .003 8-10 | 2,649 | 1,004 | 258 | 3,911 | 3,793 | 11. |  |
| Wales.. |  | -38 0 | 600 600 | 1680 200 | 180 36 3 | $\bigcirc$ | 38 |  |  |  | 3,329 | 1,332 | 17 | 4,67s | 3,494 | 780 |  |
| Webster | 7 | 3000 | 500 | 200 | 75 | 1,265 | 504 | - | 385 | .002 : $2-10$ | 1,9\% | 38 | - | 2,117 | 1,9\%2 | 155 |  |
|  | 298 | \$45 10 | \$572 | \$2 31 | 84,538 | \$57,149 | \$17,234 | - | \$3 44 | . 002 | \$59, 803 | \$40,585 | \$1,478 | \$101,459 | , 102,269 | 32,313 | 2623 |

AROOSTOOK COUN'TY.

| Towns. |  |  |  |  |  | $\begin{aligned} & 0 \\ & 000 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 2 \\ & 2 \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { m } \\ & \text { o } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 147 | 95 | 76 | 74 | 55 | . 45 | 109 |  | 9 | 4 | 118 | 4 | 4 | - | - | - | \$1,200 |  |  | 3 | 3 |  |
| Ashland | 212 | 82 | 60 | 97 | 84 | . 42 |  | 11.2 | 10 | 4 | 131 | 6 | 3 | 1 | - |  | 5,500 | 1 | - | - | 4 | 1 |
| Baneroft | 116 | St | 67 | 72 | 58 | . 54 |  |  | 10 |  | 100 | 4 | 4 |  |  |  | 300 |  | - | 5 | 5 | 1 |
| Benedicta | 184 | 94 | 76 | 98 | 78 | . 42 |  | $13 \quad 2$ | 12 |  | 88 | 4 | 2 |  | 1. | \$268 | 1,275 | 2 | - | $\stackrel{2}{6}$ | 4 |  |
| Blaine | 386 | 219 | 178 | 206 | 152 | . 43 |  | 10 | 11 | 3 | 198 | 5 | 4 | 2 | - | - | $\stackrel{2}{2} 500$ | - | 4 | 6 | 1 | $\frac{2}{4}$ |
| Bridgewater | 3.54 | 232 | 162 | 179 | 139 | . 42 |  | 14 | 14 | 3 | 22.2 | 8 | 6 | 1 | - |  | 3,000 | 1 | 6 | 7 | 1. | 4 |
| Caribou.. | 1,783 | 492 | - | 710 | - | - |  | 10 | 10 |  | 796 | 23 | 15 | - | 2 | 1,200 | 20,000 700 |  | 3 | - 4 | 5 | 1 |
| Dyer Brook | 122 | 91 | 70 | 87 | 73 | . 58 |  | 12 | 10 |  | 110 | 5 | $\stackrel{2}{10}$ |  | - |  | 4,100 4 | 1 | - 2 | 10 | 8 | 2 |
| Easton...... | 388 | ${ }^{266}$ | 192 | $\stackrel{291}{891}$ | 209 | . 52 | $\begin{array}{r}362 \\ \hline 1217\end{array}$ | 110 | 15 9 |  | 286 | 11 | 10 | $\overline{15}$ | - | - | 4,100 21,150 | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | $\stackrel{2}{3}$ | 29 | 26 | 9 |
| Fort Fairfield | 1,623 | 917 | 676 | 821 | 662 | . 51 | 1,217 | 12 | 9 10 | 2 | 795 | 28 | 26 | 15 | 3 | 1,675 | 21,500 | 5 | 3 4 | 17 | 16 | 9 |
| Fort Kent .. | 1,105 <br> 1,28 | 528 677 | 3196 512 | 422 | 313 | .32 .34 | 613 | $\begin{array}{rr}12 & 3\end{array}$ | 10 | 4 | 680 | 18 | 15 | $\stackrel{2}{2}$ | 3 | 1,670 <br> 150 | 2,000 | 9 | 4 <br> 8 | 14 | 15 |  |
| Frenchville | 1,287 | 677 291 | ${ }_{207} 21$ | $\stackrel{490}{23}$ | 178 | . 34 | 318 | 12 | 12 | 4 | 258 | 6 | 5 | 2 | 1 | 106 | 1,000 | 1 | 1 | 7 | 6 | 2 |
| Haynesville | 116 | 60 | 47 | 55 | 42 | . 38 | 79 | 8 | 11 | 3 | 100 | 4 | 2 | - | - | - | 600 | 1 | 1 | 3. | 4 |  |
| Hersey | 89 | 45 | 32 | 32 | 2.5 | . 32 | 54 |  | 10 |  | 40 | 2 | 1 | - | - | - | + 600 |  |  | 9 | $\stackrel{1}{2}$ | 3 |
| Hodgdon | 425 | 217 | 172 | 244 | 178 | . 41 |  | 8 | 10 |  | 306 | 10 | - | ${ }_{7}^{4}$ | - | 6,674 | 4,100 39,000 | ${ }_{1}^{2}$ | ${ }_{1}^{4}$ | 9 | 1 | 4 |
| Houlton | 1,297 | 837 | 726 | 895 | 804 | . 59 |  |  | 9 | 3 | 660 | 13 | 12 | 7 | 1 | 6,674 | 39,000 | 1 | 1 | 4 | 4 | 1 |
| Island Falls. | 302 | 60 | 44 | 140 | 116 | . 26 |  |  | 8 | 1 | 114 | 3 | 1 | 1 | - |  | $\stackrel{2}{3,1000}$ |  | 1 | 10 | 10 |  |
| Limestone | 347 | 254 | 189 | 272 | 210 | . 58 | 267 |  | 10 |  | 200 | 10 | 7 | - |  |  | 3,500 |  | 5 | 9 | , | 1 |
| Linneus | 384 | 198 | 144 | 231 | 161 | . 40 | 301 |  | 12 |  | 216 | 9 | 3 | 1 | - |  | 4,800 | - | 4 | 9 | - |  |
| Littleton | 277 | 181 | 162 | 156 | 153 | . 57 | 210 | 8 | 8 | 3 | 917 | 10 |  | - | 2 | 490 419 | 4,300 1,3 |  |  | - | 5 |  |
| Ludlow | 128 | 73 | 51 | 66 | 49 | . 39 |  | 10 | 9 |  | 132 | 6 | 4 | - | $\stackrel{2}{2}$ | 419 200 | 1,300 |  |  |  |  | 6 |
| Madawask | 698 387 | 395 210 | 250 169 | $\stackrel{192}{232}$ | 129 | .27 <br> .44 | 412 | 12 | 11 | 2 | 411 221 | $\begin{array}{r}12 \\ 8 \\ \hline\end{array}$ | 5 | - 1 | 2 | 200 | 3,200 3,460 | 7 1 | 6 5 | 8 | 6 | 6 2 |


| Mars IIll. | 406 | 233 | 181 | 196 | 146 | . 401 | 29010 | 10 | 3 | 260 | 9 |  |  |  | - | 4,000 |  | 3 | 10 | 8 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Masardis | 88 | 82 | 73 | 85 | 72 | . 81 | 8512 | 10 |  | 87 | 3 | 1 | - | - |  | 1,200 | - | - | 3 | 3 | 3 |
| Monticello. | 521 | $\bigcirc 41$ | 195 | 255 | 186 | .36 | 3258 | 10 |  | 264 | 10 | 9 | 1 | 3 | 1,300 | 4,500 | 1 | 2. | $\stackrel{8}{8}$ | 8 | 4 |
| New Limerick | 348 | 159 | 124 120 120 | 145 | 112 | . 46 | 170.11 | 111 | 2 | 159 | 8 | 5 | 2 | - | , | 1,500 | 1 | 2 | 5 | 4 | 1 |
| Orient.... | $6_{6}$ | 44 | 32 | 40 | 150 | . 40 | 61 6 | 38 | 3 | 168 87 | 4 | 8 | - | - | - | 2,500 1,400 | - ${ }^{4}$ | 5 | 3 | $\stackrel{2}{3}$ | $\stackrel{2}{1}$ |
| Presque Isle | 1,384 | 811 | 634 | 889 | 736 | . 50 | 925 s | 3 | 3 | 812 | 24 | 20 | - 6 | -1 | 990 | 27,000 | 5 | 4 | 24 | 24 | 1 5 |
| Sherman. | 373 | 205 | 173 | 216 | 178 | . 47 | 27510 | 314 |  | 174 | 7 | 5 | 3 | 1 | 416 | 3,495 | 3 | 2 | 4 | 6 | 1 |
| Smyma. | 122 | 63 | 31 | 82 | 27 | . 24 | 89110 | 14 |  | 108 | 4 | 1 | $\bigcirc$ | , | 418 | 9900 | 0 | 1 | 4 | 3 |  |
| Van Buren | 596 | 358 | 304 | 331 | 269 | . 48 | 382 , 12 | 12 |  | 154 | 10 | 4 | - | - | - | 1,000 | 1 | 1 | 12 | 11 | 3 |
| Washburn | 446 | 202 | 162 | 217 | 183 | . 39 | 276 | 11 |  | 262 | 11 | 11 | 1 | 2 | 1,200 | 4,000 | 2 | 3 | 10 | 8 | 3 |
| Weston | 157 | 115 | 19. | 100 | 76 | . 53 | 12910 | 14 |  | 96 | 4 | 4 | - | - | - | 1,500 | 1 | 2 | 3 | 3 | 2 |
| Woodlamd | 446 | 293 | 159 | 207 | 144 | . 34 | 28314 | 14 |  | 252 | 9 | 4 | - | 1 | 588 | 4,000 | 3 | 5 | 6 | 4 |  |

AROOSTOOK COUN'TY-Continued.



AROOSTOOK COUNTY－CONTINUED．

| Towns． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amity |  | 2280 | 8500 | \＄208 | \＄25 | \＄350 | \＄14 | － | \＄238 | ．006 5－10 | \＄360 | \＄347 | \＄118 | \＄825 | \＄909 |  | \＄84 |
| Ashlath |  | 2000 | 716 | 260 | 95 | 504 | 46 | － | 241 | ． 003 1－10 | 600 | 795 |  | 1，395 | 1，203 | \＄192 |  |
| binncroft |  | － | $3 \mathrm{S0}$ | 175 | 25 | 250 | 39 | － | 220 | ． 005 5－10 | 263 | 266 | 225 | 754 | 732 | 22 |  |
| lenericta | 5 | 3500 | 469 | 195 | 5 | 253 | － | － | 137 | ． 005 6－10 | 280 | 358 | 50 | 688 | 668 | 20 |  |
| Bhaine | 2 | 2400 | 551 | 195 | 68 | 517 | － | \＄110 | 134 | ．003 4－10 | 517 | 976 | － | 1，493 | 1，667 |  | 174 |
| Bridgewate | 11 | 2885 | 516 | 210 | 83 | 757 | － | － | 214 | ． 003 4－10 | 1，231 | 857 | 112 | 2，200 | 2，012 | 188 |  |
| Caribou | 20 | － | 567 | 200 | 400 | 3，270 | － | － | 183 | ． 002 5－10 | 5，921 | 4，264 | － | 10，185 | 7，728 | 2，457 |  |
| lyer Brook |  | 2000 | 429 | 167 | 53 | $\bigcirc 46$ | 69 | － | 202 | ． 004 6－10 | 246 | 266 | 191 | 703 | 684 | 19 |  |
| Waston | 4 | 2600 | 475 | 190 | 90 | 1，200 | 418 | － | 310 | ． 0066 2－10 | 1，438 | 1，089 | 92 | 2，619 | 2，108 | 511 |  |
| Fort Fairfiela | 27 | 2244 | 515 | 204 | 300 | 3，200 | 380 | － | 197 | 003 4－10 | 4，536 | 4，135 | 97 | 8,768 | 7，426 | 1，342 |  |
| Fort Kent | 20 | 1840 | 486 | 125 |  | 350 | － | － | 31 | ． 002 4－10 | 552 | 2,887 | 180 | 3，619 | 3，493 | 126 |  |
| Frenchville |  | 1988 | 345 | 100 | 104 | 375 | － | － | 29 | ． 002 1－10 | 376 | 3，001 | 67 | 3，444 | 3，396 | 48 |  |
| Gramd Isle | 5 | 1800 | 400 | 106 | 50 | 250 | － | － | 21 | ． $002{ }^{2}-10$ | 394 | 1，278 | 60 | 1，732 | 1，399 | 333 |  |
| Maynesville | 2 | 1950 | 469 | 170 | 20 | 225 | 1 | － | 194 | ． 005 | 348 | 298 | 97 | 743 | 648 | 95 |  |
| IIersey ．．． | 1 |  | 400 | 167 | 18 | 150 | 29 | － | 168 | ． 003 1－10 | 150 | 159 | 48 | 387 | 354 | 33 |  |
| Moolgion | 14 | 2275 | 4 4 78 | ${ }_{1}^{1} 63$ | 109 | 1，200 | 310 | － | ${ }_{2}^{2} 82$ | $.0051-10$ | 1，288 | 994 | 141 | 2，423 | 2，369 | 54 |  |
| Houlton ．．． | 14 | 10686 | 575 | 275 | 300 | 5,000 | 1，788 |  | 385 | ． 0022 2－10 | 5,000 | 3，327 | 33 | 8，360 | 8，304 | 56 |  |
| Ishmid Falls |  | 3600 | 487 | 266 | 55 | 325 | 147 | － | 104 | $.0017-10$ | 325 | 619 | 144 | 1，088 | 1，0\％2 | 26 |  |
| Limestone | 14 | 40 00 <br> -9 90 <br> 29  | 475 | （1）2 0 <br> 1 -9 | 60 | 746 800 |  | － | 215 | ．003 $9-10$ | 1，325 | 807 | 197 | 2，329 | 1，872 | 457 |  |
| Limmens |  | 2920 20 | 4 4 4 | 179 9 | 115 | 800 800 | 28 | － | 2 2 2 097 | .004 $1-10$ <br> .042 $6-10$ | 1，158 | 8989 | 111 | 2，228 | 1,832 <br> 1,679 | 396 20 |  |
| Ludlow． | 1 |  | 380 | 164 | 39 | 375 | 75 | － | 293 | ． $0043-10$ | 877 | 305 | 44 | 1，226 | 764 | 462 |  |
| Madawaska | 5 | 1830 | － | － | 40 | 325 | － | － | 47 | $.0022^{2-10}$ | 738 | 1，664 | － | 2，402 | 2，232 | 170 |  |
| Mapleton | 4 | 2500 | 457 | 188 | 115 | 665 | － | － | 172 | ． 005 1－10 | 783 | 956 | 24 | 1，763 | 1，732 | 31 |  |


| Mars Hill............. ... | - | 2200 | 4191 | 153 | 80 | 667 | - | 3 | 164 | .003 4-10 | 862 | 1,038 | 65 | 1,965 | 1,757 | 208 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Masardis | 3 |  | 500 | 250 | 11 | 200 | - | - | 224 | . $0035-10$ | 191 | 188 | 21 | 400 | 371 | 29 |
| Monticello ...... . . . . . . | 3 | 3600 | 533 | 210 | 78 | 906 | - | -- | 174 | .003 2-10 | 987 | 1,242 | 71 | 2,300 | 2,107 | 193 |
| New Limerick | 3 | 3605 | 480 | 175 | 60 | 590 | 136 | - | 238 | . 003 2-10 | 724 | 626 | 46 | 1,396 | 1,238 | 158 |
| New swerlen | - | 2212 | 450 | 16 | 56 | 556 | - | 10 | 160 | . 005 2-10 | 819 | 820 | 94 | 1,733 | 1,289 | 444 |
| Orient. | 1 | - | 349 | 200 | 10 | 196 | - | - | 292 | . 005 9-10 | 594 | 166 | 109 | 869 | 517 | 352 |
| Presque Isle | 27 | 22.25 | ${ }_{6} 05$ | 252 | 396 | 4,800 | 2,363 | - | 346 | . 004 1-10 | 3,889 | 3,108 | 132 | 7,129 | 7,557 |  |
| Sherman | - | 4000 | 500 | 225 | 73 | 819 | 92 | - | 219 | .005 5-10 | 819 | 919 | 80 | 1,818 | 1,613 | 205 |
| Smyrna.. | 2 | 2000 | 428 | 185 | 3 | 275 | 33 | - | 225 | . $0025-10$ | 454 | 303 | - | 757 | 741 | 16 |
| Van liuren | 6 | 2000 | 475 | 125 | 25 | 935 |  | - | 156 | . 005 ( 6 -10 | 2,451 | 1,604 | - | 4,055 | 2,23:3 | 1,822 |
| Washburn | 9 | 2800 | 506 | 950 | 12.5 | 9100 | 22 | - | 202 | . 004 5-10 | 1,243 | 1,044 | 63 | 2,350 | 2,2:4 | 116 |
| Weston | - | 2525 | 423 | 177 | 21 | 328 | - | - | $\stackrel{06}{1}$ | . 00758 | 36.0 | 400 | 56 | 825 | 754 | 71 |
| Woothamd | (; | 2385 | 500 | 193 | 69 | 700 | - |  | 15 | .004 9-10 | 1,490 |  | 2.66 | 2,698 | 1,458 | 740 |

AROOSTOOK COUNTY－CONClUDED．

| Plantations． |  |  |  |  |  |  |  | than 80 reach tant． |  |  |  |  |  |  |  | 䔍 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Allagash |  | \＄16 00 | \＄3 56 | \＄1 25 | \＄20 | \＄ 80 | － | － | \＄ 52 | －${ }^{-1} 10$ | \＄148 | $\$ 319$ |  | \＄467 | \＄367 | \＄100 |  |
| Cary ．．．．． |  | 2940 | 500 | 175 | 25 | 312 |  |  | 206 | ．012 1－10 | 503 | 372 | \＄180 | 1，055 | 921 | 134 |  |
| Castle Hill | 2 |  | 482 | 195 | 53 | 179 |  | \＄251 | 75 | ． $000{ }^{8-10}$ | 397 | 671 | 31 16 | 1，039 | 1，136 | 186 | \＄37 |
| Caswell． | 1 | 3200 | 425 | 200 | 23 | 292 | \＄122 | － | 165 | ． 0076 | 292 | 3362 | 16 | 676 | 484 | 18 |  |
| Chapman | － |  | 372 | 200 | 40 | 200 | 15 | － | 136 | ． 0006 6－10 | 224 | 475 | － | 899 | 961 | 138 |  |
| Connor ．．． | － | 1650 | 466 | 192 <br> 1 <br> 1 | 25 | 200 |  | － | $\bigcirc{ }^{2} 72$ | ． 0003 l （10 | 427 | 616 513 |  | 1,005 | 1，049 | － 6 | 44 |
| Crystal | 6 | 1650 | $\begin{array}{lll}3 & 83 \\ 5 & 00\end{array}$ | 174 <br> 1 <br> 15 | 57 <br> 32 <br> 1 | 50 <br> 70 <br> 80 | 262 | － | 277 -36 | ． 006 4－10 | 492 | 613 | － | 1，052 | 1，049 | 359 |  |
| Cyr ${ }^{\text {c．．．}}$ | 1 |  | 500 | 1 25 <br> 4 3 | 32 12 | 75 60 |  | － | 36 30 | ． $602{ }^{\text {6－10 }}$ | 108 | 427 | 35 | 1，570 | 477 | 93 |  |
| Gugrle Lake |  | 1700 | 4 00 <br> 6 05 | 4 3 <br> 2 38 <br> 2 25 | 12 | 60 64 | － | 5 | 183 | ． 001 3－10 | 57 | 87 | 69 | 213 | 213 |  |  |
| Garfield．．． | ${ }^{1}$ | 1600 | 6 25 <br> 3 50 | $\begin{array}{ll}2 & 25 \\ 2 & 08 \\ 1 & 2\end{array}$ | 5 | 224 | － 80 |  | 350 | ． 006 9－10 | 236 | 164 | 155 | 555 | 548 | 7 |  |
| Glenwood | －1 | 1600 - | 3 50 <br> 3 75 | 208 1 1 | 29 | 227 150 | 80 | － | － 64 | ． $002{ }^{3-10}$ | 653 | 591 | 20 | 1，264 | 872 | 392 |  |
| Hammond | － |  | 525 | 200 | 9 | 100 | 13 | － | 256 | ． 001 8－10 | 236 | 104 | 17 | 357 | 207 | 150 |  |
| Macwahoc | 1 | $25 \quad 50$ | 300 | 262 | 26 | 185 | 12 | － | 191 | ． 004 7－10 | 261 | 246 |  | 507 | 461 | 46 |  |
| Merrill | 1 | 3500 | 400 | $2{ }^{10}$ | 15 | $\bigcirc$ | 7 | － | 184 | ．003 5－10 | 243 | 242 | 15 | 500 | 492 | $\stackrel{*}{*}$ |  |
| Moro． | － | 2000 | 400 | 150 | 30 | 159 |  | － | 178 | ． 003 | 1，152 | 203 | － | 1，355 | $\bigcirc 50$ | 705 |  |
| Nashville | 1 | － | 225 | 160 |  | 73 | 46 | － | 348 | ． $00016-10$ | 104 | 45 | － | 149 | 8 | 60 |  |
| New Canada | 2 | － | 367 | 125 | 15 | 100 | － | － | ${ }^{56}$ | ．002 6－10 | 150 | 537 786 |  | － 688 | 1898 1,23 | 713 |  |
| Oakfield | － | 2340 | $40^{-}$ | 195 | 85 | 576 | －${ }_{\text {－}}$ | － | 170 | ． 00078 | 1，200 | 786 109 |  | 1，986 | 1，233 | 713 |  |
| Oxbow | 1 | － | 600 | 150 | 4 | 100 | 25 | － | 222 | ． 003 2－10 | 100 | 109 | 123 | 1，191 | 1，165 | 26 |  |
| Perhain． | 1 | 2700 | 485 | 200 | 33 | 400 | 50 | － | 178 | ． 004 3－10 | 528 | 114 | 111 |  |  | 121 |  |
| Portage Lak | 1 | － | 350 | 200 | 10 | 120 | ${ }^{8}$ | － | 182 368 | ． 0045850 | 188 | 114 | 21.2 | 895 | 754 | 141 |  |
| Reed | － | － | 366 | 200 | 20 | 400 | 238 | － | 363 | ．003 5 －10 | 42. | $56 \%$ | － | 908 | 468 | 440 |  |
| St．Francis | － | 2300 | 550 | 125 | － | 150 | － | － | 60 | ． 005 | 100 | 420 |  | 520 | 511 | 9 |  |
| St．John ．．．．．．．．．． | 3 | － | 550 | 125 | － | 100 | － | － | 62 | ． 00 | 100 |  |  |  |  |  |  |


| Silver Rillge | 1 | - | $3!9$ | 190 | 10 | 124 | - | 32 | 206 | . 003 3-10 | 216 | 146 | 101 | 463 | 387 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| stockhohn | - | - | 500 | 106 | : | 84 | - | - | 161 | - | 84 | 109 | - | 193 | 138 | 55 |
| Wate | - | - | 394 | 150 | 28 | 300 | 174 | - | 280 | . 005 4-10 | 301 | 221 | 46 | 568 | 5\%6 | 42 |
| Wallagrass | 3 | - | 392 | 100 | 16 | 100 |  | - | 29 | . 0028 6-10 | 100 | 854 | 18 | 972 | 899 | 73 |
| West field. | 6 | 3000 | 350 | 213 | 35 | 172 | 40 | - | 190 | . 002 6-10 | 385 | 201 | 78 | 614 | 503 | 111 |
| Westmanland | - | 2400 | 500 | 200 | 5 | 75 | - | - | 187 | - | 75 | 70 | 7 | 132 | 137 | 15 |
| Winterville | - |  |  |  | - | 60 |  | - |  |  | 217 | 188 | - | 405 | 236 | 169 |
|  | 256 | \$26 76 | \$4 54 | \$184 | 43,951 | 9,915 | \$7,143 | \$419 | \$178 | . 003 3-10 | \$54,520 | \$55,073 | \$4,829 | :113,922 | \$98,46 | \$16,204 \$767 |

CUMBERLAND COUNTY.



CUMBERLAND COUNTY-Concluded.



FRANKLIN COUNTY.



* Disorganized.

10

FRANKLIN COUNTY-CONCLUDED.

| Towns. |  |  |  |  |  |  | Not less than 80 cents for each inhabitant. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 芯 | ت্ত |  |  |  |  |  |  |  |  |  |
|  |  |  | $\begin{aligned} & 00 \% \\ & 000 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 80\% ${ }^{\text {cta }}$ |  |  |  | $\stackrel{5}{\infty}$ | $\stackrel{\text { gid }}{5}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Avon | , | $\$ 2200$ | \$3 53 | \$157 | \$40 | \$500 | \$149 | - | \$3 00 | . 003 7-10 | \$592 | \$395 | 85 | \$992 | \$990 | \$ 2 |  |
| Carthage | 3 |  | 375 | 155 | 35 | 450 | 138 |  | 400 | . 004 1-10 | 487 | 273 |  | 760 | - $\begin{array}{r}693 \\ 1,174\end{array}$ | 67 $1 \% 3$ 1 |  |
| Chesterville | 4 | 2622 | 300 | 175 | 73 | 625 | 9 |  | 313 | . 0023 3-10 | 656 | 534 | 107 | 1,297 | 1,174 | 197 |  |
| Eustis | - |  | 390 | 200 | 22 | 400 | 143 |  | 276 | .0033 6-10 | 400 | 348 | 416 | ${ }_{7}^{793}$ | 7,395 | 278 |  |
| Farmington | 21 | 4200 | 600 | 225 | 200 | 3,500 | 934 |  | 350 | . $00018-10$ | 4,697 | 2,500 | 416 | 7,613 | 7,385 898 | 278 |  |
| Freeman | 5 | 2233 | 352 | 150 | 33 | 450 | 79 |  | 331 256 | .004 <br> $.063-10$ <br> 10 | 574 | 340 <br> 452 |  | 1,019 19 | 9.98 | 77 |  |
| Industry | 4 | -0 -3 | 396 4 4 | 150 | 38 127 | 436 1,250 | - 17 |  | 256 247 | .003 <br> $.0012-10$ <br> $0-10$ | 1,502 | $\begin{array}{r}452 \\ 1,305 \\ \hline\end{array}$ | - | 1,0,807 | 2,844 |  | \$37 |
| Jay … ${ }^{\text {Jind }}$ | ${ }_{6}^{6}$ | $\begin{array}{lll}33 & 00 \\ 50 & 00\end{array}$ | 4 4 5 50 | 200 2 | 127 38 3 | 1,250 480 | 17 |  | 246 300 | . 0001 2-10 | 1,502 | 1,305 | 84 | 1,214 | -950 | 264 |  |
| Kingrield Madrid. | 3 |  | 5100 419 | 2 1 1 7 | 38 60 | 485 | 22 | - | ${ }^{2} 57$ | . 004 8-10 | 690 | 386 | 60 | 1,136 | 1,036 | 100 |  |
| New Sharon | 7 | 1600 | 388 | 155 | 90 | 1,000 | 149 | - | 386 | .002 4-10 | 1,125 | 6.56 | 69 | 1,850 | 1,510 | 340 |  |
| New Vineyard | - | 2233 | 388 | 177 | 87 | 550 | $\because 2$ | - | 300 | . 003 | 668 | 435 | - | 1,10; | 1,005 | 98 |  |
| Phillips ... | 4 | 3450 | 505 | 256 | 224 | 2,070 | 95. | - | 435 | .003 9-10 | 2,816 | 1,178 | 60 | 4,054 | 3,702 | 35: |  |
| Rangeley | - | 4000 | 441 | 248 | 45 | 500 | 57 | - 50 | 271 | . 0022 6-10 | 559 | 519 | - | 1,069 | 1,132 | - |  |
| Salem .. | 2 | 2f; 00 | (f)00 | 250 | 7 | 125 | 18 | 50 | 255 | . 002 5-10 | 138 | 598 | 87 | 1.77 | 1.197 |  | 60 90 |
| Strong | 3 | -- | 530 | 200 | 73 | 550 | 48 | - | 280 | .002 2-10 | 553 | 537 | 87 | 1,176 | 1,197 |  | - 8 |
| Temple | 6 | 25-00 | 408 | 168 1 | 14 | 376 |  |  | 342 <br> 248 <br> 18 | . $002 \mathrm{7}-10$ | 430 | 293 <br> 636 |  | 1,517 | 1,431 |  |  |
| Weld | 4 | $2{ }^{2} 804$ | 3 2! | 198 | 120 | 736 | 23 |  | 2 2 3 | .003 7-10 | - 8.663 | $\bigcirc$ | 147 | 1,517 | 2,950 | s. |  |
| Wilton. | 10 | 3000 | 500 | 225 | 125 | 1,426 | 129 | - | 300 | . 002 | 1,666 | 1,151 | 147 | 2,964 | 2,950 | 14 |  |



* Disorganized.

HANCOCK COUNTY.

| Towns. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amberst | 119 | 75 | 66 | 70 | 58 | . 52 | 87 | 11 |  | 15 |  | 86 |  |  |  |  |  |  |  |  |  |  |  |
| Aurora | 40 | 21 | 19 | 19 | 17 | . 45 | 21 | 110 |  | 11 |  | 4:2 | 3 | 3 <br> 2 | 1 | - | - | $\$ 800$ 500 |  |  | $\stackrel{3}{2}$ |  |  |
| Bluehill | 701 | 395 | 342 | 415. | 338 | . 48 | 453 | 8 |  | 16 |  | 472 | 18 | 14 | 14 | - | - | 7,200 | 2 |  | 19 |  | 2 |
| Brooklin. | 32: | 166 | 142 | 159 | 129 | .42 | 211 | 10 |  | 9 |  | 220 | 9 | 7 | 6 | - | - | 3,200 |  |  |  |  | 2 |
| Brooksville | 420 | 224 | 178 | 233 | 174 | . 42 | 273 | 9 |  | 9 | 3 | 234 | 7 | 7 | 7 | 2 | \$1,162 | 4,125 |  |  |  |  |  |
| Bucksport. | 655 | 416 | 356 | 381 | 322 | . 51 | 542 | 9 | 3 | 9 | 2 | 442 | 15 | 12 | 8 | - | -1, | 10,000 |  |  | 14 | 16 |  |
| Ca-tine | 289 | 146 | 129 | 147 | 136 | . 46 | 185 | 11 |  | 11 |  | 228 | 5 | 5 | 5 | - | - | 5,900 | - |  | 7 | 16 |  |
| Cranberry Isle | 104 | 58 | 52 | 69 | 60 | . 54 | 72 | 9 |  | 11 | 2 | 94 | 4 | 3 | 3 | - | - | 1,500 | - | 1 | 4 | 4 | 5 |
| Dedhant | 99 | 59 | 54 | 69 | 61 | . 58 |  | 10 |  | 11 | 3 | 119 | 6 | 5 | 2 | - | - | 1,200 | - |  | 5 | 4 |  |
| Deer Isle | 1,40t | 750 | 614 | 832 | 735 | . 48 | 903 | 10 |  | 10 |  | 750 | 21 | 19 | 17 | 2 | 1,000 | 15,000 | - | -20 | 25 | 5 |  |
| Fastbrook | 86 | 54 | 41 | 57 | 50 | . 53 | 6 6 | 6 |  | 8 |  | S0 | 4 | 3 | 1 | 2 | , | 1,445 | 2 | 1 | 2 | 3 | , |
| Elen | 789 | 524 | 420 | 543 | 437 | . 54 | 657 | 8 |  | 9 | 2 | 462 | 14 | 14 | 12 | - |  | 30,000 | 2 | 2 | 14 | 15 |  |
| Ellsworth | 1,457 | 901 | 765 | 866 | 710 | . 50 | 1,046 | 10 | 2 | 10 | 2 | 801 | 21 | 18 | 15 | - | - | 22,000 | - | 1 | 27 | ${ }_{26}$ |  |
| Franklin | 463 | 305 | 236 | 335 | 264 | . 54 | 342 | 7 | 4 | $\checkmark$ | 1. | 246 | 9 | 7 | 1 | 1 | 625 | 5,500 | 2 | 2 | 9 | 9 | 4 |
| Gouldsboro | 376 | 231 | 196 | 241 | 207 | . 53 | 257 | 8 |  | 8 |  | 216 |  | 9 | 7 | - | - | 7,000 | 1 |  | 8 | 9 | 1 |
| Hancock. | 346 | 198 | 173 | 199 | 159 | . 48 | 246 | 8 |  | 9 |  | 181 | 7 | 6 | 6 | - |  |  |  |  |  |  |  |
| Isle au Haut. | 72 | 52 | 46 | 60 | 56 | . 73 | 64 | 9 |  | 10 |  | 86 | 2 | $\stackrel{6}{2}$ | 1 | - | - | 5,300 | - 1 | $-6$ | 6 4 | $\frac{1}{5}$ | 2 2 2 |
| Lamoine | 189 | 113 | 102 | 114 | 98 | . 58 | 139 | 8 | 3 | 9 | 4 | 140 | 5 | 2 | 2 | - | - | 1,00 4,090 | - | $-1$ | 4 | 5 | -2 |
| Mariaville... | 85 | 55 | 45 | 56 | 42 | . 51 | 56 | 10 |  | 8 | 3 | 64 | 5 | 5 | 2 | - | - | 1,200 | - | - 1 | 5 2 | 5 | 3 |
| Mount Deser | 464 | 261 | 214 | 293 | 240 | . 48 | 340 | 10 |  | 11 |  | 242 | 10 | 4 | 6 | - |  | 1,215 | -1 | - 4 | 10 | 8 | 1 |
| Orland | 395 | 249 | 205 | 242 | 191 | . 50 | 263 | 9 |  | 11 |  | 315 | 14 | 13 | 5 | , | 486 |  | 1 |  |  | 12 | 2 |
| Otis | 70 | 43 | 36 | 46 | 38 | . 53 | 49 | 8 | 3 | 6 |  | 60 | 1483 | 13 | - | - | 486 | $\xrightarrow{3,500}$ | - | - 1 | $\begin{array}{r}13 \\ 3 \\ \hline\end{array}$ | 12 3 | 2 |
| Penobscot. | 381 | 236 | 212 | 237 | 214 | . 55 | 281 | 9 |  | 8 | 1 | 246 | 11 | ${ }^{-9}$ | 10 | - | - | 3,800 | - | -1 | 10 | 9 | . 3 |



* No. 8 reorganized 1896 .



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KENNEBEC COUNTY.

Towns.

| Towns. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Albion.. | 238 | 154 | 129 | 132 | 116 | . 51 | 173 | 8 |  | 7 | 3 | 192 | 9 | 8 | 2 | - | - | \$ 2,000 |  |  |  | 4 |  |
| Augusta | 3,163 | 1,187 | 1,052 | 1,307 | 1,093 | . 34 | 1,340 | 11 |  | 12 | 3 | 1,256 | 26 | 16 | 20 | - | - | 85,000 | 2 | 2 | 35 | 33 | 9 |
| Belgrade | 290 | 150 | 129 | 180 | 155 | . 49 | 209 | 8 | 3 | 8 | 1 | 222 | 18 | 4 | 4 | - | - | 3,000 | - | 4 | 8 | 5 | 16 |
| Benton | 309 | 168 | 137 | 186 | 148 | . 46 | 212 | 10 |  | 9 |  | 205 | 10 | 7 | 3 | 1 | \$2,773 | 6,350 | - |  | 6 | 6 |  |
| Chelsea | 236 | 132 | 107 | 127 | 104 | . 45 |  | 10 |  | 10 |  | 259 | 9 | 9 | 1 | - | - | 2,300 | - | 1 | 9 | 8 |  |
| China | 384 | 238 | 192 | 192 | 160 | . 45 | 288 | 9 |  | 12 |  | 264 | 19 | 1 | 1 | - | - | 3,500 | 1 | 6 | 11 | 3 |  |
| Clinton | 429 | 243 | 214 | 253 | 213 | . 51 | 276 | 8 |  | 8 |  | 320 | 12 | 6 | 4 | - | - | 2,200 | - | 1 | 13 | 12 | 1 |
| Farmingdale | 198 | 85 | 68 | 80 | 67 | . 34 | 95 | 12 |  | 12 |  | 144 | 4 | 3 | 2 | - | - | 3,875 | - |  | 4 | 3 |  |
| Fuyette.. | 148 | 64 | 57 | 78 | 66 | . 42 | 95 |  |  | 8 | 3 | 118 | 8 | 7 | 3 | - | - | 2,500 | - |  | 5 | 6 | 1 |
| Gardiner | 1,547 | 772 | 667 | 806 | 698 | . 44 | 850 |  |  | 11 | 3 | 588 | 10 | 7 | 4 | 2 | 3,000 | 30,000 | 1 |  | 18 | 18 | 6 |
| Hallowell | 787 | 545 | 499 | 551 | 489 | . 63 |  |  |  | 12 |  | 422 | 11 | 11 | 11 | - | - | 35,000 | 1 |  | 13 | 13 | 1 |
| Litchfield | 301 | 177 | 141 | 183 | 164 | . 51 | 214 | 9 |  | 7 | 2 | 316 | 15 | 9 | 4 | - | - | 4,000 | 1 | 5 | 12 | 9 |  |
| Manchester | 146 | 81 | 69 | 80 | 67 | .46 | 92 | 10 |  | 10 |  | 130 | 7 | 7 | 3 | - | - | 3,500 | - | 5 | 6 | 1 |  |
| Monmouth | 287 | 136 | 116 | 170 | 141 | . 45 | 181 | 9 |  | 10 |  | 233 | 12 | 9 | 5 | - | - | 3,200 | - | - | 7 | 8 | 2 |
| Mt. Vernon | 190 | 117 | 95 | 129 | 112 | . 54 | 148 | 8 | 2 | 10 | 4 | 174 | 11 | 10 | 5 | - | - | 4,0610 | - | - | 8 | 6 | 1 |
| Oakland | 530 | 294 | 247 | 292 | 253 | . 47 | 420 | 10 |  | 10 |  | 266 | 9 | 5 | 6 | - |  | 8,000 | - | 1 | 10 | $\stackrel{9}{9}$ | 3 |
| Pittston | 340 | 225 | 186 | 223 | 188 | . 55 | 265 | 9 |  | 9 |  | 305 | 10 | 9 | 1 | - | - | 3,000 | 3 | 3 | 8 | 7 |  |
| Randolph | 261 | 178 | 144 | 163 | 136 | . 53 | 206 | 12 |  | 11 | 3 | 14.2 | 2 | 2 | 2 | - | - | 3,500 | - |  | 5 | 5 | 2 |
| Readfield | 269 | 135 | 114 | 134 | 111 | . 42 | 151 | 10 |  | 10 |  | 160 | 5 | 3 | 3 | - | - | 3,600 | 1 | 1 | 4 | 5 |  |
| Rome | 146 | 87 | 73 | 89 | 68 | . 49 | 96 | 8 |  | 12 |  | 100 | 6 | 4 | - | - | - | 750 | 2 | 3 | 3 | 2 |  |
| Sidney | 334 | 149 | 130 | 157 | 130 | . 40 | 193 | 8 |  | 12 |  | 220 | 19 | 8 | 1 | 1 | 971 | 2,144 | 1 | 2 | 10 | 9 | 1 |
| Vassalbor | 648 | 290 | 240 | 328 | 260 | . 38 | 331 | 9 |  | 9 | 3 | 208 | 18 | 10 | 3 | 1 | 3,400 | 10,009 | 2 | 3 | 9 | 8 | 3 |
| Vienna .. | 108 | 77 | 63 | 53 | 44 | .49 | 97 | 9 |  | 10 | 4 | 131 | 9 | 4 | - |  | - | 873 | - | 1 | 6 | 4 | 1 |



KENNEBEC COUNTY-CONClUDED.


| Watervi | 35 | 10535 | 1063 | 300 | 1,000 | 10,500 | 4,814 | - | 364 | . 001 9-101 | 12,008 | 6,699 | - | 18,707 | 19,011 | - | 304 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wayne.................... | - | 1934 | 350 | 192 | 62 | 620 | - | - | 296 | . 0026 6-10 | 663 | 544 | - | 1,207 | 1,144 | 63 |  |
| W est Gardiner | - | 2000 | 370 | 218 | 60 | 800 | 113 | - | 406 | . $0025-10$ | 1,251 | 447 | 20 | 1,718 | 1,aı17 | 201. |  |
| Windsor. | $\bigcirc$ | 2667 | 457 | 217 | 68 | 682 | - | - | 283 | .002 5-10 | 868 | 581 | - | 1,444 | 1,271 | 173 |  |
| Winslow |  | 1963 | 515 | 219 | 118 | 1,452 | - 11 | - | 213 | . $00012-10$ | 1,645 | 1,46:3 | - | 3,108 | 2,875 | 233 |  |
| Winthrop | 23 | 8600 | $\pm 14$ | 275 | 219 | 1,800 | 111 | - | 350 | . $0014-10$ | 1,808 | 1,230 | 190 | 3,228 | 3,025 | 203 |  |
| Unity Pl......... ........ | - | 1600 | 300 | 125 |  |  | 10 | - | 357 | . 0036 -10 | 60 | 45 |  | 105 | 101 | 4 |  |
|  | 192 | \$39 07 | \$5 15 | \$2 16 | \$3,111 | \$53,251 | \$8,808 | - | $\$ 332$ | . 001 7-10 | \$64,745 | \$39,115 | 10,903 | \$114,763 | \| 103,974 | \$11,197 | \$408 |

## KNOX COUNTY.

| Towns. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \dot{0} \\ & \underset{\sim}{0} \\ & 0 \\ & 0 \\ & 0 \\ & \vdots \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Appleton...... | 320 696 | 19.5 | 160 | 237 | 194 | . 58 |  | 8 |  | 7 | 2 | 220 | 11 |  |  |  |  | \$ 4,500 |  |  | 12 | 10 |  |
| Camhing | 696 <br> 198 <br> 1 | 371 113 | 318 92 | 399 103 | 335 85 | . 47 | 423 |  |  | 11 | $\stackrel{3}{3}$ | 343 | 7 |  |  |  | - | 10,650 | -2 | 2 <br> 2 | 12 | 12 | $\frac{2}{2}$ |
| Friendship | 252 | 151 | 141 | 150 | 124 | . 52 | 155 | ${ }_{8}^{8}$ |  | 8 | $\stackrel{2}{3}$ | 162 | ${ }_{7}^{6}$ | $\stackrel{2}{7}$ |  |  |  | 1,900 |  | $\stackrel{2}{2}$ | 6 | 4 | 1 |
| Hope | 169 | 38 | 86 | 112 | 91 | . 52 | 127 | 10 |  | 9 | $\stackrel{3}{3}$ | 126 | 7 | i | ¢ | , | - | 2,000 1,400 |  | 3 |  |  | 3 |
| Hurricane isle | 78 | 37 | 30 | 57 | 53 | $\stackrel{.53}{ }$ | 60 | 10 |  | 11 |  | 123 | 1 | 1 | 1 | 1 | - | 1,400 130 | - | 1 | 4 | 3 |  |
| North Haven.. | 163 | 92 | 81 | 85 | 77 | . 48 | 92 |  |  | 9 | 3 | 102 | 6 | 4 | 4 |  | - | 1,500 | - | $\stackrel{1}{2}$ | ${ }_{6}$ | $\frac{2}{3}$ |  |
| Rockport | 2,281 | 1,510 410 | 1,292 | 1,370 | 1,089 | . 52 | 1,610 | 10 |  | ${ }_{10}^{11}$ | 3 | 1,190 | 13 | 3 | 313 | - | - | 80,000 | 3 | , | 41 | 41 | 4 |
| South Thomasto | 452 | 295 | ${ }_{258}$ | ${ }_{306}$ | ${ }_{263}^{338}$ | $\stackrel{.57}{7}$ |  | $1{ }_{8}^{12}$ |  | $1{ }_{1}^{10}$ | 2 | 195 | ${ }^{7}$ | ${ }_{6}^{6}$ | 6  <br>  5 |  | - | 16,000 4,000 | - ${ }^{3}$ | 5 | 9 | 8 | ${ }^{6}$ |
| St. George | 908 | 463 | 357 | 452 | 372 | . 42 | 584 | 9 |  | 410 | 4 | 483 | 15 | 12 | 10 | ) | - | 4,500 | 2 | $\stackrel{2}{6}$ | 12 | $\stackrel{10}{8}$ | $\stackrel{3}{5}$ |
| Union. | 780 | 486 | 438 | ${ }_{24}^{453}$ | 394 | . 53 | 551 | 10 |  | 11 |  | 352 | 9 | 6 | $6{ }^{6}$ | , | - | 12,000 | $\stackrel{2}{2}$ | 1 | 11 | 12 | 5 |
| Vinalbave | 902 | 495 | 459 | 246 | 492 | . 48 |  | 10 |  | ${ }_{1}$ |  | 304 | 15 | $\stackrel{9}{9}$ | ${ }^{3}$ | , | - | 6,653 | 1 | 4 | 12 | 9 |  |
| Warren | 658 | 316 | 267 | 294 | 252 | . 40 | 336 | 8 |  | $\stackrel{1}{9}$ |  | $\stackrel{19}{458}$ | 17 | 15 | 10 |  | - | $\begin{array}{r}13,050 \\ 7 \\ \hline 000\end{array}$ | - | 1 | 16 | 16 | 8 |
| Matinicus Isle Pl | 382 | 206 | 176 | 235 | 219 | . 52 | 247 | 8 |  | 8 | 3 | 275 | 11 |  | 6 |  | - | 1,400 | - | 1 | , | 2 |  |
| Matinicus Isle PI | 63 | 32 | 28 | 36 | 30 | $\cdot 46$ | 41 | 7 |  | 12 |  | 26 | 1 |  | 11 | - |  | , | - | 1 |  |  |  |
|  | 9,397 | 5,489 | 4,766 | 5,386 | 4,829 | . 50 | 6,326 | 9 | 1 | 9 | 4 | 5,290 | 159 | 107 | 80 | , | - | \$168,683 | 14 | 44 | 194 | 164 | 46 |

KNOX COUNTY--Concluded.


IINCOLN COUNTY.

| Towns. |  |  |  |  |  | $\begin{aligned} & 0 \\ & 00 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  | $\dot{3}$ 0 0 0 0 0 <br> d. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alna | 126 | 95 | 83 | 97 | 80 | . 64 | 99 | 8 |  | 8 |  | 192 | 6 | 4 | 4 |  | - | \$3,000 | - |  | , |  | 2 |
| Boothbay | 684 | 405 | 348 | 400 | 362 | .55 | 417 | 9 | 41 | 10 | 1 | 469 | 12 | 8 | 8 | 1 | 910 | 6,569 | 5 | 7 | 10 |  | 3 |
| Boothbay Harbor | 646 | 387 | 347 | 404 | 336 | . 53 | 316 |  |  | 11 |  | 330 | 6 | 5 | 3 |  | - | 8,000 | 1 | 1 | 10 | 10 | 2 |
| Bremen ...... . | 182 | 119 | 105 | 116 | 92 | . 54 | 131 |  |  | 10 |  | 120 | 7 | 5 | 2 |  | - | 2,600 |  | 5 | ${ }^{6}$ |  |  |
| Bristol. | 780 | 494 | 448 | 527 | 473 | . 59 | 557 | 8 |  | 9 | 2 | 509 | 20 | 19 | 13 |  | - | 9,965 | - | 5 | 19 | 14 | 3 |
| Damariscotta | 225 | 120 | 104 | 111 | 98 | . 45 | 145 | 9 | 4 | 8 | 3 | 171 | 6 | 5 | 3 | - | - | 2,609 | 1 | 1 | 6 | 5 | 1 |
| Dresden.. | 303 | 158 | 131 | 168 | 135 | . 43 | 190 |  |  | 9 10 | 3 | 180 | 8 | 7 | 5 | - | - | $\stackrel{2,050}{ }$ | - | 1 | 6 | 6 | $\stackrel{2}{2}$ |
| Ealgecomb | 236 | 136 | 109 | 157 | 128 | $\cdot 50$ | 167 | 8 |  | 10 |  | 175 | ${ }^{7}$ | 4 | 7 | - | - | 2,500 | , | 1 | ${ }^{7}$ | 6 |  |
| Jefferson. | 379 | 226 | 187 | 266 | 229 | . 55 | 285 | 8 |  | 8 |  | 328 | 15 | 12 | 16 | - | - | 3,000 3,500 | $\stackrel{2}{1}$ | $\left\lvert\, \begin{aligned} & 5 \\ & 1 \end{aligned}\right.$ | 13 10 | 98 10 |  |
| Newcastle | 317 | 186 | 155 | 158 | 141 | .47 |  | 9 | 2 | 9 | 2 | ${ }_{207}^{253}$ | 11 | 9 | 6 3 | - | 1,000 | 3,500 4,000 | 1 |  | 10 | 10 3 | 4 <br> 3 |
| Nobleboro. | $\begin{array}{r}308 \\ 135 \\ \hline 1\end{array}$ | 156 68 | 139 48 | 163 68 | 145 50 | .46 | 170 | 9 8 |  | 8 |  | 207 84 | 8 | 7 | 3 | - | 1,000 | 4,000 1,000 | 3 1 | $2$ | 7 | 3 <br> 1 | 3 |
| Somerville | 135 | 68 | 48 70 | $\stackrel{68}{8}$ | 50 | . 36 | 73 | 8 |  | 10 9 |  | 84 90 | 4 | 3 4 4 | 3 <br> 2 | - | - | 1,000 |  | $-{ }^{2} \mid$ | $\stackrel{2}{3}$ | 4 |  |
| Waldoboro | 841 | 458 | 414 | 471 | 417 | . 4.9 |  | 8 |  | 10 | 2 | 716 | 28 | 25 | 7 | - | - | 11,967 | 1 | 6 | 27 | 12 | 4 |
| Westport | 121 | 67 | 56 | 72 | 72 | . 53 |  | 10 |  | 10 |  | 90 | 3 | 3 | 3 | - | 68 | 1,700 | - | 3 | 3 | - | $\underline{2}$ |
| Whitefield | 334 | 156 | 130 | 202 | 168 | . 44 |  | 8 |  | 8 | 3 | 268 | 12 | 10 | 2 | 2 | 687 | 5,000 | - | 5 | 11 | 6 | , |
| Wiscasset | 500 | 361 | 310 | 356 | 308 | . 60 |  | 11 |  | 12 | 1 | 297 | 6 | 2 | 5 | - | - | 3,500 | 2 | 2 | 9 | 7 | 3 |
| Monhegan Pl . | 29 | 21 | 17 | 21 | 17 | . 60 |  | 12 |  | 12 |  | 24 |  | 1 | 1 | - | - | 500 |  | - | 1 | 1 |  |
|  | 6,293 | 3,692 | 3,201 | 3,840 | 3,322 | . 52 | 4,192 | 9 | 2 | 9 | 3 | 4,503 | 165 | 133 | 78 | 4 | \$2,597 | \$72,506 | 17 | 45 | 156 | 112 | 32 |

LINCOLN COUN'TY-(Oncledmed.


OXFORD COUNTY.


$\infty$

OXFORD COUN'TY-CONCLUDED.


| Roxbury | 2 | - 1 | 383 | 183 | 15 | 300 | 122 | - | 441 | .006; 2-10 | 235 | 154 | - | 4891 | 371 | 118 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rumford | 17 | 2850 | 500 | 260 | 300 | 2,700 | 1,982 | - | 335 | .002 2-16 | 2,700 | 1,933 | 176 | 4,809 | 4,755 | 54 |
| Stoneha | - | - | 483 | 150 | 30 | 300 | 42 | - | 268 | . $0041-10$ | 322 | 288 | - | 610 | 570. | 40 |
| Stowe. | - | - | 486 | 115 | 28 | 400 | 167 | - | 390 | .003 1-10 | 454 | 258 | - | 712 | 643 | 69 |
| Summer | 3 | 1600 | 420 | 162 | 70 | 721 |  | - | 300 | .002 $5-10$ | 844 | 636 | 46 | 1,526 | 1,473 | 53 |
| Sweden | - | - | 352 | 150 | 49 | 300 | 30 | - | 322 | .002 $2-10$ | 4.11 | 226 | 64 | 701 | 677 | 24 |
| Upton | - | 2600 | 430 | 200 | 10 | 196 | 10 | - | 251 | .002 $2-10$ | 196 | 191 | 150 | 537 | 520 | 17 |
| Waterford | - | 3500 | 413 | 187 | 100. | 900 | 100 | - | 350 | . 003 | 953 | 708 | 168 | 1,429 | 1,796 | 33 |
| Woodstock | - | 2500 | 305 | 175 | 83 | 900 | 213 | - | 426 | .004 1-10 | 918 | 594 | 5 | 1,517 | 1,517 |  |
| Plantations. |  | 1700 | 275 | 138 | 13 | 91 | 1 | - | 234 | .003 6-10 | 92 | 102 | - | 194 | 194 |  |
| Lincoln | 2 | 2000 | 500 | 200 |  | 54 | 7 | - | 245 | . $0012-10$ | 244 | 267 | - | 511 | 168 | 343 |
| Magalloway | - | - | 490 | $\bigcirc 20$ |  | 60 | - |  | 375 | . 00008 -10 | 266 | 337 | 30 | 673 | $\because 21$ | 452 |
| Milton.. | - | - | 875 | 220 | 5 | 200 | 31 | - | 203 | .00:3 s-10 | 200 | 216 | 4 | 420 | 420 |  |
|  |  | 83065 | \$4 56 | \$189 | - 0 , 809 | \$31,340 | \$6,802 | \$9 | \$3 47 | .002 5-16 | \$34,942 | \$23,733 | 72,50s | \$61,183 | \% 59,441 | $43,425,1683$ |

PENOBSCOT COUNTY.

| Towns. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alton | 123 | 66 | 69 | 78 | 67 | . 51 | 86 | 8 |  | 9 |  | 111 | 4 | 4 |  | - | - | \$1,600 | - | 2 | 4 | 2 | 1 |
| Argyle | 71 | 50 | 41 | 56 | 50 | . 64 | 56 | 10 | 3 | 9 | 2 | 108 | 4 | 4 | 1 | - | - | 800 | - |  |  | 3 |  |
| Bangor | 5,856 | 3,262 | 2,887 | 3,329 | 2,905 | . 49 | 3,502 | 10 |  | 13 |  | 2,760 | 36 | 20 | 28 | 1 | 60,009 | 200,000 | - | 4 | 99 | 101 | 48 |
| Bradford | 366 | 171 | 148 | 194 | 181 | . 45 | 245 | 8 |  | 7 | 3 | 230 | 15 | 8 | 2 | - | (00, | 3,000 | - | 5 | 10 | 6 | 1 |
| Bradley | 953 | 16 a | 139 | 158 | 127 | . 52 | 196 | 10 |  | 12 |  | 158 | 3 | 3 | 1 | - | - | 3,000 | 1 | 1 | 4 | 4 |  |
| Brewer | 1,369 | 817 | 72.5 | 839 | 737 | . 53 | 851 | 11 |  | 10 | 4 | 5.30 | 12 | 10 | 7 | - | - | 31,200 | - | - | 24 | 23 | 2 |
| Burlington | 156 | 105 | (2) | 104 | 82 | . 52 | 113 | 10 |  | 10 | 4 | 165 | 5 | 5 | - | - | - | 1,500 | - | - | 6 | 6 | 2 |
| Carmel .... | 303 | 200 | 161 | 213 | 180 | . 56 | 221 |  |  | 11 | 3 | 2.97 | 11 | 8 | 1 | - | - | 2,800 | - | 2 | 12 | 10 |  |
| Carroll... | 173 | 115 | 88 | 82 | 53 | . 40 | 138 | 9 | 1 | 10 | 2 | 147 | 7 | 4 | - | - | - | 4,000 | 1 | 1 | \% | 4 | 3 |
| Charleston | 278 | 147 | 126 | 153 | 136 | . 47 | 198 |  |  | 9 |  | 207 | 10 | 8 | 1 | - | - | 5,000 | $\rightarrow$ | 5 | 8 | 3 |  |
| Chester.. | 162 | 104 | 85 | 108 | 81 | . 51 | 127 |  |  | 9 | 3 | 123 | 6 | 5 | , | 1 | 370 | 2,000 | 1 | 5 | 2 | 6 | 1 |
| Clifton.. | 84 | 50 | 45 | 48 | 39 | . 50 | 68 | 9 |  | 12 |  | 84 | 5 | 2 | - | , | - | 1,500 | - | - | 4 | 4 |  |
| Corinna | 350 | 207 | 184 | 212 | 185 | . 52 | 250 |  |  | 10 |  | 290 | 12 | 9 | 8 | - | - | 3,500 | - | 3 | 10 | - 9 |  |
| Corinth | 259 | 163 | 141 | 154 | 131 | . 47 | 182 | S |  | 10 |  | 221 | $1: 2$ | 10 | 1 | - | - | 3,495 | - | 1 | 8 | 7 |  |
| Dexter. | 800 | 52 ; | 4971 | 530 | 461 | . 60 | 1668 | 9 | 2 | 9 | 2 | 500 | 10 | 14 | 11 |  | - | 30,000 | - | 1 | 17 | 15 | 4 |
| Dixmont | $\bigcirc 35$ | 128 | 117 | 159 | 122 | . $5:$ | 172 | 8 |  | 8 | 4 | 260 | 13 | 8 | 4 | - | - | 2,800 | - | 7 | 10 | 4 |  |
| Eddington | 210 | 120 | 108 | 132 | 116 | . 53 | 149 | 9 |  | 9 | 3 | 178 | 7 | 6 | 2 | \| | _ | 5,000 | - | 2 | 7 | 4 | 3 |
| Edinburg | 23 | 11 | 10 | 13 | 10 | . 43 | 14 | 9 | 3 | 8 |  | 27 | 2 | 1 | - | -- | - | 500 | 1 | 1 |  |  |  |
| Enfield. | 371 | 201 | 170 | 216 | $13: 3$ | . 41 | 231 | 8 |  | 6 | 4 | 192 | - | 4 | 1 | - | - | 2,950 | - | , | 9 | 9 | 1 |
| Etna | 187 | 115 | 96 | 126 | 106 | . 51 | 143 | 8 |  | 9 | 2 | 174 | 7 | 6 | 3 | - | - | 1,195 | - | 1 |  | 6 |  |
| Exeter | 235 | 94 | 84 | 179 | 153 | . 51 | 180 | 8 | 1 | 8 | 2 | 199 | 13 | 11 | 3 | 1 | 300 | 2,145 | - | 4 | 8 | $\because$ | 1 |
| Garland | 251 | 114 | 97 | 114 | 96 | . 38 | 149 | 8 |  | 9 |  | 234 | 9 | 7 | 8 | - | - | 3,682 | - | - | 9 | 9 |  |
| Glenburn | 133 | 72 | 58 | 76 | 59 | . 44 |  | 9 | 4 | 11 | 1 | 128 | 7 | 5 | - | - | - | 857 | - | - | 7 | 4 | 2 |
| Greenbush | 245 | 155 | 126 | 146 | 114 | . 50 | 166 | 10 |  | 10 | 3 | 172 | 7 | 6 | - | 1 | 536 | 2,028 | - | J | 7 | 6 | , |
| Greenfield. | 65 | 33 | 24 | 34 | 22 | . 35 |  | 10 |  | 10 |  | 40 | 5 | 3 | - | - | - | 1,200 | - | - | 2 | 2 |  |



[^4]| Towns. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alton | 2 | \$18 00 | \$3 75 | \$160 | \$28 | \$400 | \$122 | - | \$3 25 | . $0031-10$ | \$657 | \$281 | - | \$938 | \$609 | \$329 |  |
| Argyle | 2 | - | 350 | 200 | 20 | 429 | 151 | - | 604 | . 0066 2-10 | 469 | 188 |  | 657 | 645 | 12 |  |
| Bangor | 105 | 12183 | 810 | 350 | 2,200 | 38,000 | 22,718 | - | 648 | . 0028 8-10 | 38,000 | 13,702 | 300 | 52,002 | 52,457 | - | \$455 |
| Bradford | 14 | 3200 | 485 | 169 | 125 | 1,000 | 28 | - | 273 | . 0035 5-10 | 900 | 887 | 133 | 1,920 | 1,954 | - | 34 |
| Bradley | 1 | 4300 | 550 | 300 | 55 | 660 | 2 |  | ${ }_{2}^{2} 61$ | . 004 | 660 | 616 | $-$ | 1,276 | 1,294 | - | 18 |
| Brewer. | - | - | 592 | 200 | 300 | 3,760 | 406 |  | 274 | . 0028 8-10 | 3,770 | 3,191 | 83 | 7,044 | 6,994 | 50 |  |
| Burlington | - |  | 472 | 156 | 45 | 392 | 24 |  | 251 | .002 9-10 | 541 | 412 | 262 | 1,215 | 1,083 | 132 |  |
| Carmel .... | 3 | 2000 | 337 | 154 | 98 | 853 | - | - | 281 | .002 9-10 | 1,004 | 756 | 67 | 1,827 | 1,515 | 312 |  |
| Carroll | - | 2500 | 350 | 175 | 29 | 437 |  |  | 247 | .003 9-10 | 763 | 457 | 71 | 1,231 | 1,000 | 231 |  |
| Charlesto | 2 | 2810 | 409 | 173 | 103 | 800 | 23 | - | ${ }_{2}^{288}$ | .002 3-10 | $82 \cdot 2$ | 728 | 79 | 1,629 | 1,635 |  | 6 |
| Chester | , | 1600 | 393 | 196 | 54 | 400 | 106 | - | 247 | . 006 1-10 | 480 | 392 | 123 | 995 | 840 | 55 |  |
| Clifton.. | - | - | 419 | 150 | 35 | 228 |  | - | 271 | . $00388-10$ | 271 | 238 | 15.5 | 664 | 527 | 137 |  |
| Corinna | 16 | 1766 | 465 | 175 | 100 | 1,500 | 534 |  | 428 | . $0031-10$ | 1,581 | 852 | 88 | 2,521 | 2,472 | 49 |  |
| Corinth | - | 4500 | 454 | 188 | 100 | 1,000 | 77 1.340 | - | $\begin{array}{ll}3 & 45 \\ 4 & 41\end{array}$ | .002 $2-10$ | 1,115 | 723 2,013 | 87 164 | 1,925 | 1,788 | 137 |  |
| Dexter.. | 26 | 28 38 | 575 | 175 | 200 | 3,525 | 1,340 | - | 4 4 3 12 | . $00011-10$ | 3,916 | 2,013 668 | 164 | 6,093 1,506 | 5,880 | 213 |  |
| Diximont | - | $\begin{array}{ll}35 & 00 \\ 37 & 50\end{array}$ | 300 4 | 175 | 68 50 | 735 650 | - 67 |  | $\begin{array}{ll}3 & 12 \\ 3 & 10\end{array}$ | . $002{ }^{7-10}$ | 735 1,025 | 668 521 | 103 | 1,506 | 1,441 | 65 375 |  |
| Eddington | - | $\begin{array}{lll}37 & 50 \\ 20 & 00\end{array}$ | 425 | 212 2 2 | $50 \mid$ | 650 60 | 67 17 | - | $\begin{array}{ll}3 & 10 \\ 2 & 61 \\ 1\end{array}$ | $.004-10$ <br> $.0015-10$ | 1,025 60 | 521 44 | -108 | 1,546 | 1,171 | 375 |  |
| Enfield E. | - | 20.00 | $\overline{5} 30$ | 250 1 150 | $\begin{array}{r}5 \\ 39 \\ \hline\end{array}$ | 60 500 50 | 11 | \$115 | 2 1 1 35 | . 002 L 1-10 | 500 | 864 | 197 | 1,464 | 1,464 |  |  |
| Etua | - | 3200 | 314 | 153 | 72 | 517 | - | - | 276 | . 0038 8-10 | 517 | 442 | 29 | 988 | 1,030 | - | 42 |
| Exeter | 5 | 3200 | 379 | 175 | 70 | 752 | - | - | 390 | $.0017-10$ | 921 | 569 | 245 | 1,735 | 1,385 | 350 |  |
| Garland | $\stackrel{9}{9}$ | - | $3{ }^{3} 2$ | 177 | 91. | 973 | 195 | - | 388 | .002 3-10 | 1,114 | 619 | 9 180 | 1,742 | 1,760 | - 0 | 18 |
| Glenburn | 2 | - | 500 | 182 | 70 | 600 | 134 | - | 451 | . 003 7-10 | 645 | 357 | 180 | 1,182 | 1,173 | $\stackrel{9}{0}$ |  |
| Greenbush | 2 | 2933 | 423 | 221 | 50 | 530 | 3 | - | ${ }_{2}^{217}$ | . 006 9-10 | 696 | 614 <br> 179 | - | 1,310 | 1,270 | 40 |  |
| Greenfield. .. | 2 | - | 400 | 150 | 7 | 250 | 65 | - | 384 | . 004 2-10 | 262 | 179 | - | 441 | 410 | 31 |  |


| Hampden |  | 33001 | 474 | 195 | 299 | 2,000 | 13 | $\cdots$ | 316 | .002 9-10 | 2,955 | 1;609 | - | 4,555 | 3,963 | 592 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hermon | 4 | 2684 | 401 | 173 | 89 | 1,100 | 74 | - | 250 | .002 8-10 | 1,158 | 1,090 | - | 2,243 | 1,851 | 36 |  |
| Holden |  | 17 00 | 406 | 150 | 46 | 600 | 113 | - | 400 | .003 9-10 | 643 | 372 | 28 | 1,043 | 1,015 | 28 |  |
| Howland | 1 | 3100 | 550 | 275 | 30 | 350 | 213 | - | 224 | .002 1-10 | 646 | 325 |  | $9{ }^{9} 1$ | $8: 3$ | Ts |  |
| Iludson | - | 2500 | 392 | 158 | 40 | 420 | 12 | - | 280 | . 003 6-10 | 564 | 355 | 111 | 1,030 | 881 | 14.3 |  |
| Kenduskeag | - | $40 \quad 00$ | 300 | 200 | 16 | 4.50 | 22 | - | 3 ts | .002 6-10 | 479 | 375 | 52 | 906 | 857 | 49 |  |
| Kingman .. | - | 4000 | 450 | 160 | 21 | 550 | 13 | - | 163 | . 00388 -10 | 550 | 79 | 75 | 1,422 | 1,231. | 191 |  |
| Lagrange | - | 3200 | 422 | 175 | 75 | 600 | 23 | - 13 | 282 | . 003 1-10 | 716 | 581 | 54 | 1,351 | 1,219 | 136 |  |
| Lee .. | 2 | 2600 | 409 | 225 | 60 | 730 |  | 13 | $\bigcirc 4.7$ | .005 6-10 | 746 | 770 | 60 | 1,576 | 1,554 | 22 |  |
| Levant | - | 3520 | 458 | 175 | 75 | 800 | 96 |  | 260 | .002 9-10 | 88 | 750 | 85 | 1,717 | 1,602 | 115 |  |
| Lincoln | - | 3250 | $4 \cdot 29$ | 197 | 173 | 1,400 | - | 5. | 245 | . $0032-10$ | 1,422 | 1,392 | 205 | 3,019 | 2, 2120 | 99 |  |
| Lowell | - | - | 500 | 175 | 45 | 320 | - | 21 | 340 | .003 6-10 | 455 | 238 | 66 | 759 | 744 | 15 |  |
| Mattamiscontis | - | - | 275 | 139 | 3 | 40 | 2 | - | 400 | .002 6-10 | 91 | 2 | - | 113 | 78 | 33 |  |
| Mattawamkeag | 2 | 4833 | 180 | 221 | 35 | 507 |  | - | $\stackrel{40}{ }{ }^{2}$ | . $0035-10$ | 895 | 529 | 200 | 1,624 | 1438 | 186 |  |
| Maxfield | - |  | 350 | 150 | 4 | 150 | 43 | - | 385 | . $0142-10$ | 179 | 10.3 | 24 | 312 | 313 |  | 1 |
| Medway | 3 | 3500 | 413 | 215 | 2.5 | 500 |  | 22 | 223 | .003 7-10 | 952 | 338 | 15 | 1,335 | 1,160 | 175 |  |
| Milford. | 5 | 4250 | 775 | $\stackrel{2}{2} 0$ | 50 | 889 | $\because 21$ | - | 334 | . $0037-10$ | 889 | 683 | - | 1,572 | 1,476 | 96 |  |
| Mt. Chase | 3 | 1670 | 320 | 160 | 46 | 350 | 123 | - | 309 | . $0083-10$ | 363 | 28.2 | 112 | 757 | 654 | 103 |  |
| Newburg |  | 3000 | 420 | 170 | 60 | 700 | 6 | - | 278 | . 002 4-10 | 833 | 576 | - | 1,409 | 1,316 | 93 |  |
| New port. |  | 3400 | 5 60 | 200 | 112 | 1,050 | 100 | - | 294 | .001 8-10 | 1,300 | 785 | 144 | 2,229 | 2,168 | 61 |  |
| Old Town | 25 | 11100 | 800 | 300 | 300 | 4,800 | 550 | - | 395 | . 003 6-10 | $5,5 \div 0$ | 3,514 | $\sim$ | 9,041 | 9,384 |  | 343 |
| Orono... | 18 | 10000 | 760 |  | 75. | 2,300 | 68 | - | 262 | .002 2-10 | 2,427 | 2,179 | 1 | 4,625 | 4,554 | 71 |  |
| Orrington | 7 | 2200 | 450 | 300 | 150 | 1,300 | 175 | - | 384 | . 003 2-10 | 1,368 | 85.7 | 69 | 2,294 | 2,237 | 57 |  |
| Passadumkeag | , | 2s 00 | 400 | 200 | 23 | 250 |  | 24 | 250 | . $0053-10$ | 308 | 248 |  | 556 | 526 | 30 |  |
| Patten...... | 7 | 2200 | 433 | 200 | 100 | 1,050 | 301 | - | 296 | . $0028-10$ | 1,331 | 904 | 70 | 2,305 | 2,010 | 295 |  |
| Plymouth | 3 | 2700 | 420 | 185 | 70 | 700 | 149 | - | 327 | . 003 6-10 | 821 | $5: 34$ | 24 | 1,379 | 1,132 | 247 |  |
| Prentiss. |  | - | 404 | 150 | 25 | 335 | 14 | - | 204 | . 004 2-10 | 401 | 544 | 113 | 1,064 | 872 | 192 |  |
| Springfiela | - | 2000 | 388 | 200 | 25 | 800 | 258 | - | 394 | . 006 2-10 | 1,057 | 539 | 17 | 1,596 | 1,208 | 388 |  |
| Stetson | 3 | 3400 | 383 | 150 | 50 | 600 | 107 | - | 331 | . $0025-10$ | 815 | 43:2 | 171 | 1,418 | 1,375 | 43 |  |
| Veazie | 3 | - | 583 | 300 | 50 | 520 |  | - | 346 | .001 9-10 | 582 | 360 | - | 942 | 955 | - | 13 |
| Winn | 9 | 3600 | 450 | 206 | 40. | 750 | 1 | - | 277 | .004 7-10 | 801 | 666 | 255 | 1,722 | 1,581 | 141 |  |
| Plantations. <br> Drew | * | * | * | * | * | 200 | 112 | - | 465 | . 008 2-10 | 202 | 107 | - | 309 | 259 | 50 |  |
| Lakeville | 1 | 2000 | 316 | 200 | 12 | 95 |  | 20 | 183 | . 00178 | 173 | 340 | - | 513 | 528 |  | 15 |
| No. 2, Grand Falls | - | - | 350 | 150 | - | 64 | 10 | - | 337 | . 001 6-10 | 76 | 42 | 42 | 160 | 160 |  |  |
| Seboois | - | - | 570 | 200 | - | 125 | 47 | - | 300 | . $0038-10$ | 127 | 99 | - | 226 | 212 | 14 |  |
| Stacyville | 5 | 2000 | 340 | 195 | 22 | 400 | 200 | - | 241 | .008 6-10 | 835 | 375 | - | 1,210 | 485 | 725 |  |
| Webster |  |  | 375 | 180 | 6 | 100 | - |  | 175 | .002 7-10 | 286 | 174 |  | 460 | 240 | 220 |  |
| Woodville | 1 | 2144 | 340 | 200 | 20 | 190 | - | 4 | 200 | . 003 5-10 | 323 | 242 | 59 | 624 | 614 | 10 |  |
|  |  | \$34 50 | \$4 45 | \$198 | \$6,286 | \$87,036 | \$29,078 | \$232 | \$3 94 | . $002 \mathrm{~S}-10$ | \$95,560 | \$54.459 | \$4,431 | \$154,459 | \$14,8;0 | \$7, $5 \%$ |  |

PISCATAQUIS COUNTY．

| Towns． |  | 80 <br> E $\dot{3} \dot{\square}$ <br> 丑齿 <br> 『 <br> $-2$ <br> ${ }_{\infty}$ 雷 <br> 资雲 <br>  <br> $\dot{\square}$ |  |  |  |  | $\begin{aligned} & \text { Number of different } \\ & \text { pupils registered. } \end{aligned}$ |  |  |  |  |  |  |  | $\begin{aligned} & \dot{\oplus} \\ & \underset{\sim}{\ddot{x}} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \vdots \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Abbot | 182 | 108 | 90 | 112 | 83 | ． 48 | 116 | $9 \quad 2$ | 11 | 163 | 8 | 6 | 3 | － | － | \＄3，500 | － |  |  | 7 |  |
| Atkinson | 197 | 120 | 99 | 127 | 106 | ． 52 | 151 | 8 | 8 | 152 | 10 | 10 | － | － | － | 1，500 | － | 2 |  | 5 | 1 |
| Blanchard | 67 | 32, | 27 | 33 | 25 | ． 38 | 35 | 8 | 12 | 32 | 1 | 1 | － | － | － | 600 | － |  |  | 1. |  |
| Brownville | 380 | 180 | 152 | 221 | 187. | .48 |  | 911 | $10 \quad 1$ | 261 | 9 | 8 | 2 | － | － | 4，500 | 11 | 1 | 10 | 10 | ， |
| Dover | 450 | 312 | 267 | 320 | 262 | ． 58 | 347 | 10 | $10 \sim 1$ | 377 | 14 | 12 | 1 | 1 | \＄675 | 13，300 | ${ }^{1}$ | $\stackrel{2}{2}$ | 1 | 11 | 3 |
| Foxcroft | 363 | 290 | 256 | 279 | 249 | ． 69 |  | 10 | 10 | 330 | 7 | 5 | 1 | － | － | 6，009 | 1 | $\bigcirc$ | 12 | 11 | 1 |
| Greenville | 316 | 93 | 75 | 159 | 132 | ． 33 | 187 |  | 10 | 140 | 4 | 3 | 2 | － | － | 2，000 | 1 | 1 |  | 3 | 2 |
| Guilford． | 450 | 304. | 257 | 316 | 263 | ． 58 | 324 | 10 | 9 | 276 | 8 | 8 | 1 | $\because$ | 2，060 | 19，090 | 1 | 1 | 10 | 10 | 4 |
| Medford | 122 | 91 | 79 | 87 | 75 | ． 63 | 100 | $9 \quad 4$ | 93 | $53^{1}$ | 5 | 1 | 1 | － | ， | 400 | － | － |  | 3 |  |
| Milo | 324 | 154 | 150 | 234 | 203 | ． 54 | 241 | $8 \quad 2$ | $8 \quad 4$ | 198 | 8 | 4 | 1 | － | － | 8，000 | 1 | 4 |  | 3 | 3 |
| Monson | 431 | 190 | 166 | 304 | 255 | ． 50 | 327 | 93 | 12 | 318 | 7 | 6 | 1 | － | － | 1，150 | 1 | 1 |  | 11 |  |
| Orneville | 135 | 64 | 48 | 68 | 57 | ． 40 |  | 10 | 8 | 104 | 6 | 3 | － | － | － | 1，000 | － | 1 |  | 3 |  |
| Parkman | 2.24 | 122 | 111 | 124 | 112 | ． 50 | 163 | 81 | 10 | 138 | 12 | 9 | 1 | － | － | 1，204 | 1 | － |  | 6 |  |
| Sangerville | 324 | 136 | 119 | 153 | 13：3 | ． 40 | 145 | 8 | 9 | 208 | 10 | 3 | 2 |  | － | 8,000 | － | － |  | 8 |  |
| Sebec．．．．．． | 245 | 159 | 155 | 154 | 138 | ． 55 | 179 | 8 | 9 | 228 | 10 | 9 | ＂ |  | － | 3,800 | － | 3 |  | － 7 |  |
| Shirley | 83 | 46 | 43 | 56 | 41 | ． 51 |  | 8 | 8 | 73 | 3 | 3 | － | 1 | 373 | 1，200 | － | 1 |  | （1） |  |
| Wellington． | 219 | 143 | 119 | 157 | 123 | ． 60 | 180 |  | 11 | 198 | 8 | ${ }_{6}^{6}$ |  | － | － | 600 | 1 | 3 |  | ${ }^{6}$ |  |
| Williamsburg | 39 | 25 | 19 | 25 | 20 | ． 50 |  | 8 | $\stackrel{9}{4}$ | 40 | 3 | $\stackrel{2}{2}$ | 1 | － | － | 400 | 1 | 1 |  | 1. | 1 |
| Willimantic． | 136 | 74 | 67 | 89 | 71 | ． 51 | 96 | 8 | 12 | 96 | 3 | 31 | 2 |  | － | 2，000 | － | 1 |  | 2 |  |
| ＊Barnard Pl．．． | 41 | －10 | －8 | 8 | －${ }^{-1}$ |  |  | $9^{-}$ |  | －32 | 1 |  |  |  |  | 650 |  |  |  | 1 |  |
| Bowerbank Pl Elliottsville Pl | 14 12 | 10 | 8 | 8 | 6 | ． 50 | 10 | 9 | 11 | 20 | － | $-$ | － | － | ${ }_{-}$ | 30 |  | － |  | 1 |  |
| Kingsbury Pl． | 48 | 36 | 30 | 4. | 32 | ． 68 | 42 | 8 | 12 | 60 | 3 | 3 | － | － | － | ${ }^{6} 900$ | 1 | 2 |  | 1 |  |
| Lake View Pl ． | 46 | 28 | 24 | 30 | 27 | ． 55 | 30 | 10 | 10 | 30 | 1 | － | － | － | － | 37．） |  |  |  |  |  |
|  | 4，849 | 2，757 | 2，347 | 3，102 | 2，607 | ． 51 | 3，445 | 9 | $9 \quad 4$ | 3，531 | 143 | 108 | 22 | 5. | 83，548 | \＄79，899 | 12 | 26 | 12 | ｜ 114 | 19 |

PISCATAQUIS COUNTY-Concludeis.


SAGADAHOC COUNTY.


SAGADAHOC COUNTY-CONClUDED.



Plantations.
Bigelow ........................
Brixhton.
Brirhion
Carratunk
Carratunk .......................
Dennistown
Flagstaff
Mighland
Jackman .
Lexington. .
Mayfield.....
Moose River
No. 1, R. 2 , w. $\mathfrak{F} . \mathrm{R} . .$.
The Forks.
West Forks


SOMERSET COUNTY-Concluded.



WALDO COUN'TY.

| No. of chilitren belonging <br> in town between the ages <br> of 4 and 21 years. |
| :--- |
| No. registered in spring <br> and summer terms. |
| Average number in spring <br> and summer terms. |
| No. registered in fall and <br> winter terms. |


| A verage number in fall |
| :--- |
| and winter terms. |

Percentage of average
attendance.


| $\frac{5}{1}$ | $\begin{aligned} & 1 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\left[\begin{array}{l} \overrightarrow{3} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array}\right.$ |  |
| :---: | :---: | :---: | :---: |

Cost of the same.


| Belfast ........ |  |
| :---: | :---: |
|  | Belmon |
| Brooks |  |
| Burnham |  |
| Frankfort. |  |
| freedom <br> Islesboro. |  |
|  |  |
| Jackson ...... . .... .. |  |
| Knox . . . . . . . . . . . . . . . . |  |
| Liberty |  |
| Lincolnville ... ......... |  |
| Monroe ............ .. |  |
|  | Montville |
| Morrill ................. |  |
| Northport .... . . |  |
|  |  |
| Patermo |  |
| Searsmont .... |  |
| Searsport............... |  |
| Stockton Springs .. .... <br> Swanville |  |
|  |  |
| Thorndike . |  |
| Troy . ............... |  |
| Unity <br> Waldo |  |
|  |  |
|  | Winterport |


| 1,605 | 890 |  |
| ---: | ---: | ---: |
| 115 | 78 |  |
| 236 | 111 |  |
| 295 | 184 |  |
| 350 | 179 |  |
| 158 | 63 |  |
| 334 | 186 |  |
| 131 | 66 |  |
| 172 | 102 |  |
| 260 | 181 |  |
| 391 | 264 |  |
| 276 | 152 |  |
| 251 | 108 |  |
| 141 | 81 |  |
| 191 | 125 |  |
| 253 | 110 |  |
| 253 | 148 |  |
| 304 | 164 |  |
| 421 | 249 |  |
| 284 | 169 |  |
| 203 | 131 |  |
| 155 | 91 |  |
| 251 | 152 |  |
| 293 | 172 |  |
| 193 | 97 |  |
| 568 | 283 |  |
| 8,091 | 4,536 | 3 |


| 854 | 917 |  |
| ---: | ---: | ---: |
| 64 | 79 |  |
| 75 | 138 |  |
| 149 | 192 |  |
| 149 | 197 |  |
| 49 | 107 |  |
| 154 | 193 |  |
| 55 | 72 |  |
| 78 | 132 |  |
| 143 | 222 |  |
| 210 | 278 |  |
| 122 | 175 |  |
| 92 | 154 |  |
| 71 | 90 |  |
| 100 | 122 |  |
| 106 | 122 |  |
| 123 | 170 |  |
| 137 | 200 |  |
| 222 | 244 |  |
| 138 | 195 |  |
| 117 | 119 |  |
| 73 | 130 |  |
| 124 | 173 |  |
| 131 | 164 |  |
| 85 | 146 |  |
| 244 | 349 |  |
| 3,865 | 5,079 | 4, |


| 885 |
| ---: |
| 65 |
| 96 |
| 152 |
| 166 |
| 78 |
| 162 |
| 6 |
| 16 |
| 111 |
| 183 |
| 233 |
| 145 |
| 127 |
| 78 |
| 98 |
| 996 |
| 140 |
| 164 |
| 221 |
| 161 |
| 102 |
| 95 |
| 142 |
| 140 |
| 130 |
| 272 |
| 4,312 | | .54 |
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| .45 |
| .40 |
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| 10 |
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| - |
| 636 |
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| \$20,000 | 2 | 2 | 21 | 24 | 3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1,075 | - | 1 | 5 | 4 | 1 |
| 1,005 | 1 | 6 | 6 | 1 | 1 |
| 1,600 | - | 1 | 9 | 7 | 1 |
| 2,915 | 1. | 1 | 5 | 5 | - |
| 1,189 | $1)$ | 1 | 5 | 6 |  |
| 2,000 | 1 | 3 | 6 | 4 | $\stackrel{2}{2}$ |
| 1,200 | - | 4 | 4 |  |  |
| 1,040 | - | 5 | 7 |  |  |
| 2,400 | 1 | 3 | 8 | 6 | 1 |
| 3,350 | - | 1. | 15 | 13 | 2 |
| 2,500 | - | 3 | 8 | 7 |  |
| 3,000 | - | 6 | 7 | 2 | 1 |
| 900 | - | 2 | 4 | 2 |  |
| 2,800 | - | 2 | 7 | 5 | 4 |
| 2,125 | - | 3 | 7 | 3 |  |
| 1,924 | - | 2 | 6 | 4 |  |
| 3,580 | - | 2 | 10 | 9 | 1 |
| 10,000 | - | 1. | 9 | 8 | 5 |
| 4,800 | - | 2 | 9 | 7 | 3 |
| 2,766 | - | 2 | 5 | 3 | 2 |
| 1,200 | - | 6 | 6 |  |  |
| 2,600 | 1. | 6 | 9 | 4 |  |
| 2,000 | - | 5 | 8 | 3 | 2 |
| 1,500 | 1 | 3 | 4 | 1 |  |
| 5,000 | 2 | 6 | 13 | 9 | 6 |
| \$84,469 | 11 | 79 | 203 | 137 | 37 |

WALDO COUNTY-CONClUDED.


WASHINGTON COUNTY.



WASHINGTON COUNTY-CONCLUDED.



YORK COUN'TY.

| Towns. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 10 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Acton. | 220 | 107 | 91 | 152 | 125 | . 49 | 156 | 9 | 313 | 4 | 177 |  |  | 7 |  | - | - | \$2,600 |  |  |  |  | 5 |
| Alfred | 321 | 154 | 132 | 143 | 122 | . 40 |  |  |  |  | 201 |  |  |  |  |  |  |  |  |  |  |  |  |
| Berwick. | 604 | 354 | 305 | 360 | 304 | . 50 | 389 | 10 | 110 | 2 | 427 | ${ }^{14}$ |  | 9 |  |  | - | 14,500 | 8 |  | 15 |  |  |
| Biddeford | 5,228 | 1,217 | 1,060 | 1,194 | 1,054 | . 20 | 1,734 |  | 12 |  | 1,426 | 6 |  | 21 |  |  | - | 160,000 | $\stackrel{8}{8}$ | - $8_{7}^{8}$ | 39 | 39 <br> 8 | 1 |
| Buxton | 487 | 268 |  |  | 250 <br> 144 | . 49 | 178 | 8 9 | $8{ }^{10} 10$ |  | 420 208 | 8 15 |  | $\begin{array}{r}13 \\ 5 \\ \hline\end{array}$ | ${ }_{2}^{5}$ |  | \$328 | ${ }_{7,090}$ | $\stackrel{1}{2}$ | 1 | 13 <br> 5 |  |  |
| Cornish. | 310 124 | 155 60 | $\begin{array}{r}127 \\ 54 \\ \hline\end{array}$ | 167 66 | 144 | . 44 | 178 74 | $1{ }^{9}$ | ${ }^{310} 12$ | 3 | 140 |  |  | 4 | 2 | - | \$328 | 1,400 | 1 | 1 | $\stackrel{5}{3}$ |  | - 1 |
| Eliot. | 365 | 207 | 167 | 218 | 174 | . 46 | 252 |  | 18 | 4 | 260 |  |  | 1 | , |  | - | ${ }^{4,200}$ |  |  | 7 | ${ }^{7}$ | , |
| Hollis | 349 | 215 | 184 | 258 | 224 | . 59 | 263 |  |  |  | 315 | 518 |  | 17 | $\stackrel{2}{2}$ |  |  | 3,095 | $\begin{array}{r}1 \\ 2 \\ \hline\end{array}$ | 仡 | 12 | 17 | - ${ }^{6}$ |
| Kennebunk | 728 | 513 | 427 <br> 258 <br> 8 | ${ }_{285}^{518}$ | 442 | . 60 | 557 375 | 11 | 3 2 1110 | 1 | 526 433 | 12 12 | 1 | 11 | 12 | - | - | 9,000 | 1 <br> 4 | 4 | 11 |  |  |
| Kennebunkport | 588 | 2975 | ${ }_{322}^{258}$ | 285 | $\stackrel{243}{310}$ | .$^{46}$ | 412 |  | ${ }^{2} 10$ | 3 | 418 | 11 |  | 9 | 10 | - | - | 12,000 |  | 5 | 11 |  | 8 |
| Lebanon | 359 | 225 | 191 | 258 | 207 | . 55 | 263 |  | 13 |  | $\stackrel{276}{ }$ | 15 |  | ${ }^{6}$ | 11 | - | - | 5,000 |  |  | 11 | 2 | 1 |
| Limerick | $\stackrel{224}{ }$ | 120 | 106 | 104 | 83 | . 42 | 136 |  | 10 9 |  | 160 |  |  | 5 |  |  | - | $\stackrel{3,235}{3,560}$ | - |  | 9 |  | , |
| Limington | 310 228 | 146 | 137 123 | 159 | 139 124 | $\begin{array}{r}\text { - } \\ .54 \\ \hline\end{array}$ | 203 |  | 9 12 | 3 | ${ }^{222}$ | ${ }^{1} 10$ |  | $\stackrel{7}{9}$ | 3 | - | - | 4,800 | - | 1 | 9 |  | 8 |
| Newfiela | 194 | 128 | 113 | 100 | 81 | . 50 | 136 |  | 10 |  | 130 |  | 6 | 4 | 2 | - | - | 2,800 | 1 |  | 4 |  |  |
| North Berw | 528 | 339 | 298 | 319 | 288 | . 55 | 406 |  | 210 |  | 415 | 517 | 2 | 12 | 3 | , |  | $\stackrel{\text { ¢,500 }}{5,000}$ |  |  | 14 |  |  |
| Old Orchar | ${ }_{312}^{167}$ | $\begin{array}{r}97 \\ 198 \\ \hline\end{array}$ | 81 153 1 | 113 | 86 184 | -50 | 1285 |  | 313 <br> 9 | 3 | 108 310 | 14 | 4 | ${ }_{9}$ |  | - | - | 11,500 |  |  | 9 |  |  |
| Saco .... | 1,999 | 1,178 | 1,080 | 1,131 | 970 | . 51 | 1,231 |  | 13 | 1 | 999 | 926 | , | 23 | 23 | , | 1,200: | 55,000 | , | - 5 | 24 | 24 | \| |


| Sanford | 1,821 | 776 | 630 | 872 | 710 | . 37 | 1,119 |  | 10 | 3 | 840 | 16 | 14 | 12 | - | - | 24,962 | 4 | 3 | 25 | 26 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shaplejgh | 250 | 134 | 117 | 135 | 114 | . 46 | 156 | 8 | 8 | 3 | 172 | 8 | 3 | - | - | - | 3,229 | 1 | 5 | 7. | 1. |  |
| South Berwi | 938 | 455 | 373 | 452 | $3 \times 1$ | . 40 | 508 |  | 11 |  | 558 | 14. | 12 | 5 | 1 | 800 | 9,000 | 2 | 1 | 15 | 16. |  |
| Waterboro | 328 | 198 | 169 | 192 | 152 | . 49 | 230 | 9 | 13 |  | 286 | 13 | 11 | 2 | - | - | 4,000 | 3 | 3 | 10 | 10, |  |
| Wells | 574 | 311 | 970 | 304 | 259 | . 46 |  | 10 | 10 |  | 470 | $16]$ | 11 | 15 | 1 | 545 | 9,000 | - | 6 | 16 | 7 |  |
| York | 712 | 394 | 340 | 399 | 338 | . 54 | 416 | 10 | 10 |  | 150 | 14 | 10 | 11. | 2 | 1,400 | 10,350 | - | 2 | 15 | 13 |  |
|  | 18,949 | 8,786 | 7,562 | 8,917 | 7,564 | . 40 | 10,616 | 10 | 10 | 4 | 10,243 | 329 | 258 | 149 | 7 | \$4,273 | \$395,659 | 49 | 82 | 324 | 284 | 52 |

YORK COUN'IY-CoNClUdED.

| Towns. |  |  |  |  | $\begin{aligned} & \bar{\circ} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | Notless than 80 cents for each inhabitant. |  |  |  |  |  |  | E |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\stackrel{ \pm}{ \pm}$ |  |  | $\stackrel{\square}{\square}$ | 『 |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $\begin{aligned} & 00 \\ & 00 \end{aligned}$ |  |  |  | $\stackrel{\square}{\square}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $23$ |  |  | O. | - |  |  |  |  |  |  |  |  |  |
|  |  |  |  | $9_{8}$ |  |  |  | 馬 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Acton. |  | \$21 20 | \$4 84 | \$200 | \$46 | \$ 750 | \$48 | - | \$2 93 | .002 5-10 | \$ 910 | \$534 | \$48 | \$1,492 | \$1,337 | \$155 |  |
| Alfred | 3 | 5800 | 743 | 250 | 65 | 1,150 | 126 |  | 358 | . 002 7-10 | 1,207 | 802 |  | 2,009 | 1,575 | 134 |  |
| Berwick | 15 | $60 \quad 00$ | 506 | 200 | 172 | 2,500 | 665 |  | 414 | . 002 6-10 | 1,790 | 1,568 |  | 3.358 | 4,363 |  | 1005 |
| Biddefor | 30 | 9625 | 987 | 300 | 1,600 | 20,000 | 8,446 |  | 382 | . $00224-10$ | 20,000 | 11,767 | 1,000 | 32,767 | 36,118 |  | 3351 |
| Buxton | , | 2500 | 425 | 225 | 125 | 1,800 | 171 |  | 369 | . 00026 6-10 | 3,048 | 1,275 |  | 4,323 | 3,560 | 763 |  |
| Cornish | 4 | ${ }^{6} 800$ | 823 | 230 | 87 | 1,100 | 206 |  | 355 | . 002 4-10 | 1,245 | 733 | 18 | 2,036 | 1,949 | $\begin{array}{r}87 \\ 200 \\ \hline\end{array}$ |  |
| Dayton | , | 1600 | 350 | 300 | 33 | 800 | 400 | - | 645 | . 0033 3-10 | 899 | 315 | - | 1,214 | 1,014 | 200 |  |
| Eliot | 3 | 3600 | 854 | 304 | 125 | 1,600 | 430 |  | 440 | . $0033^{4-10}$ | 1,625 1,344 | 899 860 | - | 2,524 2,204 | 2,457 2,146 | 67 58 |  |
| Hollis. | 3 | $24{ }^{3} 00$ | 450 | 2 2 00 | 88 | 1,250 | $\underline{628}$ |  | 3 4 4 59 | . 00316 | 1,344 | 860 1,881 | - | 2,204 5,163 | 2,146 4,998 | 58 165 |  |
| Kennebunk | 15 | $\begin{array}{cc}60 & 00 \\ 37 & 60\end{array}$ | $\begin{array}{ll}500 \\ 7 & 46\end{array}$ | 2 2 2 2 | 250 | 3,200 9,300 | 662 543 | - | 4 4 3 3 | . $00016-10$ | 3,282 2,525 | 1,881 1,422 | - | 5,163 3,947 | 4,998 | 165 159 |  |
| Kennebunkport | 5 | $\begin{array}{lll}37 & 60 \\ 50 & 00\end{array}$ | 746 800 | 2 3 3 50 | 155 | 2,300 2,400 | 543 109 | - | 3 3 3 3 | . 0018 8-10 | 2,525 | 1,422 | - | 3,947 4,325 | 3,788 4,370 | 159 |  |
| Kittery . | 5 | $\begin{array}{lll}50 & 00 \\ 94 & 00\end{array}$ | 8 5 5 7 | 3 3 2 00 | 131 90 | 2,400 1,029 | 109 | - | $\begin{array}{ll}3 & 51 \\ 2 & 87\end{array}$ | .003 9-10 | 2,598 | 1,727 <br> 902 <br>  | 125 | 4,325 | 4,376 2,196 |  | 45 |
| Lebanon | 11 | $\begin{array}{lll}24 & 00 \\ 19 & 00\end{array}$ | $\begin{array}{ll}5 & 78 \\ 3 & 92\end{array}$ | [2 00 <br> 2 14 | 90 65 | 1,029 1,000 | ${ }^{18}$ | - | 287 +46 | .002 7 -10 | 1,240 | 902 591 | 125 | 2,267 1,612 | 2,196 | 71 283 |  |
| Limerick | 20 | $\begin{array}{ll}12 & 00 \\ 30\end{array}$ | 3 4 4 400 | $\begin{array}{lll}2 & 14 \\ 2 & 00\end{array}$ | 65 92 | 1,000 | 227 1 | - |  | .002 $1-10$ | 1,021 1,181 | 591 760 | - | 1,612 | 1,740 | 288 |  |
| Limington | 20 | 30 20 200 | 400 467 | 2 2 2 000 | 42 | 875 | 1 317 | - | 2.82 4.38 | . $0002{ }^{5}-10$ | 1,181 | 760 611 | - | 1,941 | 1,740 1,413 | $\stackrel{2015}{215}$ |  |
| Lyman | 8 | 22 <br> 35 <br> 350 | 46 | 200 2 2 50 | 49 <br> 34 | 1,009 | 317 |  | 4 4 3 28 | $.002 \quad 7-10$ $.002 ~ 5-10$ | 1,017 <br> 891 | 611 | 45 | 1,402 | 1,415 | 215 |  |
| North Berwick | 16 | 35 <br> 46 <br> 60 | 5108 678 | 350 | 130 | 2,000 | 558 | - | 380 | . 002 4-10 | 2,152 | 1,301 | 55 | 3,508 | 3,291 | 217 |  |
| Old Orchard. | 2 | 6300 | 800 | 300 | 25 | 702 | - | - | 420 | . 001 | 733 | 388 | - | 1,121 | 915 | 206 |  |
| Parsonfield | 15 | 2550 | 440 | 182 | 84 | 1,200 | 82 |  | 384 | . 002 4-10 | 1,441 | 952 | 50 | ${ }_{2}^{2,443}$ | 2,299 | 144 |  |
| Saco ........ | 29 | 6600 | 950 | 400 | 625 | 11,000 | 6,140. | - | 555 | . 002 7 -10 | 11,000 | 4,510 | - | 15,510 | 15,777 | - | 267 |



SUMMARY.

| Counties. |  |  |  |  |  | $\begin{array}{\|c} 0 \\ 00 \\ 00 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array}$ |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 3 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Androscogrin | 16,599 | 7,279 | 6,315 | 7,530 | 6,319 | . 38 | 8,587 | 7,929 | 192 | 168 | 96 | 2 | \$4,591 | \$437,000 | 19 | 33 | 256 | 255 | 47 |
| Aroostook. | 22,428 | 12,041 | 8,790 | 11,014 | 8,009 | . 38 | 14,754 | 12,454 | 440 | 307 | 5.5 | 33 | 18,585 | 212,337 | 71 | 107 | 375 | 343 | 85 |
| Cumberland | 28,281 | 15,389. | 12,366 | 15,533 | 12,531 | . 44 | 16,952 | 11,093 | 32. | 259 | 135 | 5 | 8,342 | 716,516 | 45 | 75 | 475 | 443 | 150 |
| Franklin | 5,159 | 2,950 | 2,534 | 3,049 | 2,565 | . 49 | 3,592 | 3,707 | 113 | 108 | 25 | 5 | 8,673 | 78,194 | 17 | 39 | 139 | 117 | 48 |
| Hancock | 11,944 | 7,027 | 5,908 | 7,290 | 6,039 | . 0 | 8,536 | 7,402 | 267 | 224 | 1633 | 7 | 4,573 | 165805 | 17 | 67 | 271 | 235 | 46 |
| Kennebec | 16,026 | 7,720 | 6,564 | 7,940 | 6,700 | . 41 | 9,076 | S,552 | 322 | 198 | 118 | 6 | 10,796 | 333,477 | 20 | 60 | 305 | 262 | 62 |
| Knox | 9,397 | 5,489 | 4,766 | 5,386 | 4,529 | . 50 | 6,326 | 5,290 | 159 | 107 | 80 | - |  | 168,683 | 14 | 44 | 194 | 164 | 46 |
| Lincoln. | 6,293 | 3,692 | 3,201 | 3,840 | 3,322 | . 52 | 4,192 | 4,503 | 165 | 133 | 78 | 4. | 2,597 | 72,506 | 17 | 45 | 156 | 112 | 32 |
| Oxford | 9,016 | 5,301 | 4,594 | 5,568 | 4,825 | . 52 | 6,396 | 7,328 | 325 | 234 | 64 | 19 | 16,666 | 149,207 | 26 | 62 | 271 | 232 | 49 |
| Penobsco | 22,050 | 12,767 | 10,881 | 12,940 | 10,804 | . 41 | 14,830 | 13,716 | 461 | 335 | 143 | 11 | 65,139 | 427,701 | 28 | 99 | 504 | 426 | 116 |
| Piscataquis | 4,849 | 2,757 | 2,347 | 3,102 | 2,607 | . 51 | 3,445 | 3,531 | 143 | 108 | 28 | 5 | 3,548 | 79,899 | 12 | 26 | 129 | 114 | 19 |
| Sagadaboc | 5,518 | 3,176 | 2,809 | 3,307 | 2,921 | . 52 | 3,530 | 2,924 | 109 | 92 | 48 | 1 | 8,600 | 47,442 | 11 | 15 | 117 | 114 | 31 |
| Somerset | 9,883 | 5,585 | 4,740 | 5,692 | 4,812 | . 48 | 6,645 | 7,077 | 305 | 118 | 77 | 8 | 16,534 | 162,786 | 23 | 54 | 266 | 235 | 57 |
| Waldo | 8,091 | 4,536 | 3,865 | 5,079 | 4,312 | . 52 | 5,953 | 5,588 | 249 | 137 | 55 | 3 | 1,958 | 84,469 | 11 | 79 | 203 | 137 | 37 |
| Washingtou | 15,315 | 9,163 | 7.381 | 9,323 | 7,343 | . 48 | 10,710 | 8,161 | 965 | $\stackrel{9}{ } 9$ | 116 | 10 | 14,730 | 206,825 | 48 | 92 | 274 | 225 | 48 |
| York ....... | 18,949 | 8,786 | 7,562 | 8,917 | 7,564 | . 40 | 10,616 | 10,243 | 359 | 258 | 149 | 7 | 4,273 | 395,659 | 49 | 82 | 326 | 284 | 54 |
|  | 209,798 | 113,658 | 94,623 | 115,510 | 95,202 | . 45 | 134,140 | 119,498 | 4,196 | 2,995 | 1,424 | 126 | \$189,605 | \$3,738,506 | 428 | 979 | 4,961 | 3,698 | 925 |

summary-Concluded.

| Counties. |  |  |  |  |  |  | Not less than 80 cents for each inhabitant. |  |  |  |  |  |  | $\dot{8}$00000000000000 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | E | ¢ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | O. |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Androscogyin | 298 | \$45 10 | \$0 72 | \$2 31 | \$4,53E | \$57,149 | \$17,234 |  | \$3 44 | . 002 | \$59,803 | \$40,588 | \$1,478 | \$101,959 | \$102,260 | 楞》,313 | \$2623 |
| Aroostook.... | 256 | $\underline{26} 76$ | 454 | 184 | 3,451 | 39,915 | 7,143 | \$419. | 178 | . 0003 3-10 | 54,520 | 55,073 | 4,329 ${ }^{\text {a }}$ | 113,922 | 98,465 | 16,224 | 767 |
| Cumberlan | 299 | 3760 | 611 | 208 | 6,806 | 174,162 | 101,35 2 |  | ${ }_{6}^{616}$ | .002 5-10 | 184.855 | 60, 202 | 12,392 | 266,450 | 230, 629 | 36,458 | (137 |
| Franklin |  | $\underline{26} 37$ | 416 | 190 | 1,479 | 16,384 | 3,008 | 72 | 317 | . 002 1-10 | 20,746 | 12,926 | 1,169 | 34,841 | 32,368 | 2,631 | 188 |
| Hancock | 154 | 3283 | 486 | 221 | 3, 875 | 33,738 | 4,246 | 152 | $2 \times 2$ | . 002 4-10 | 39,048 | 20, $2 \times 2$ | 1,125 | 69,995 | 67,2,4 | 4,494 | 1,45; |
| Kenne | 192 | 3907 | 515 | 216 | 3,111 | 53,251 | 8,808 |  | 3322 | . $00017-10$ | (64,745 | 34, 115 | 10, 163 | 114,763 | 103, 0.4 | 11,197 | 408 |
| Knox | 81 | 4006 | 528 | 255 | 3,316 | 31,318 | 6,150 |  | 333 | .002 2-10 | 37,341 | 23.512 | ${ }^{6} 11$ | 61,524 | 55,573 | 5,975 | 28 |
| Lincoln | 130 | 3646 | 541 | 221 | 1,485 | 20,331 | 2,837 |  | 3.5 | . 0022 (6-10 | 22,808 | 15,633 | 142 | $38,5 \times 3$ | 38,265 | $1,62{ }^{-1}$ | 1,304 |
| Oxford | 100 | 3065 | 456 | 189 | 2,806 | : 21,340 | 6,802 | 9) | 347 | .002 5-10 | 34,942 | 23,73; | 2,508 | (61,1<3 | 59,441 | 3,425 | 1,68: |
| Penobscot | 301 | 3450 | 445 | 198 | 6,286 | 87,036 | 29,078 | 232 | 394 | .002 8 8-10 | 95,560 | 54,459 | 4,431 | 154,450 | 147,800 | 7,095 | 345 |
| Piscataqui | 140 | 32 55 | 458 | 201 | 972 | 14,341 | 1,738 | - | 296 | .002 7-10 | 17,322 | 12,203 | 1,4336 | 31,561 | 28,329 | 3,392 | 160 |
| Sagabahoc | *3 | 3352 | 578 | 221 | 2,306 | 26,984 | 11,502 | 7 | 489 | . 0023 3-10 | 28,043 | 14,680 | 324 | 43,047 | 38,346 | 4, 800 | 19 |
| Somerset | 126 | $30 \quad 32$ | 449 | 179 | 3,239 | 32,98: | 7,024 | 3 | 333 | . 002 | 36,708 | 21,213 | 1,527 | 59,448 | 56,731 | 4,80t; | 2,083 |
| Waldo | 121 | 3226 | 432 | 190 | 3,008 | 27,732 | 5,517 | 7 | 342 | . 002 6-10 | 31,113 | 19,966 | 587 | 51,666 | 48,489 | 3,414 | $\underline{237}$ |
| Washingto | 231 | 3472 | 473 | 238 | 2,489 | 38,174 | 3,028 | 21 | 249 | .002 8-10 | 45,711 | 38,43:2 | 5,016 | 89,158 | 83,538 | 5,7!2 | 172 |
| York...... | 244 | 3708 | 609 | 250 | 5,060 | 72,326 | 21,890 | 27 | 381 | $.0024-10$ | 79,027 | 45,185 | 1,444 | 125, 6.56 | 126,212 | 4,160 | 4,716 |
|  | 2,844 | \$34 39 | \$5 61 | \$2 11 | \$54,727 | \$757,163 | \$237,357 | \$949 | \$3 61 | . 0023 -10 | 4852,982 | \$515,742 | \$49,4\%2 | \$1,418,206 | * $1,317,717$ | \$118,303 | 17814 |

SPECIAL COMMON SCHOOL STATISTICS.

Counties.

| Androscogrin | 14 | 258 | 117 | 141 | . 45 | 126 | 102 | 62 | 67 | 46 | 56 | 58 | 101 | 91 | 360 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A roostook. | 67 | 465 | 49 | 416 | . 11 | 356 | 326 | 126 | 90 | 44 | 117 | 100 | 267 | 202 | $63: 3$ |
| Cuminerland | 27 | 351 | 128 | 223 | . 36 | 188 | 153 | 115 | 50 | 31 | 58 | 45 | 116 | 106 | 663 |
| Franklin | 24 | 150 | 25 | 125 | . 16 | 95 | 101 | 61 | 27 | 26 | 48 | 28 | 75 | 42 | 249 |
| Hancock | 36 | 290 | 50 | 240 | . 17 | 208 | 205 | 117 | 28 | 31 | 63 | 78 | 127 | 144 | 455 |
| Kennebec | 30 | 296 | 85 | 211 | . 29 | 184 | 159 | . 117 | 42 | 35 | 81 | 41 | 126 | 136 | 481 |
| Knox | 17 | 195 | 79 | 116 | . 40 | 105 | 94 | 54 | 19 | 13 | 37 | 41 | 27 | 54 | 302 |
| Lincoln | 18 | 168 | 20 | 148 | . 12 | 129 | 105 | 87 | 32 | 34 | 41 | 46 | 95 | 59 | 253 |
| Oxford | 39 | 298 | 32 | 266 | . 11 | 22; | 194 | 111 | $(6)$ | 28 | 73 | 56 | 154 | 108 | 454 |
| Penobscot. | 62 | 505 | 133 | 353 | . 26 | 296 | 274 | 159 | 30 | 46 | 114 | 94 | 31 | 194 | 818 |
| Piscataquis | 24 | 140 | 34 | 106 | . 23 | 92 | 103 | 66 | 20 | 11 | 36 | 24 | 64 | 42 | 217 |
| Sagalahoc | 11 | 102 | 31 | 71 | . 30 | 61 | 55 | 30 | 14 | - | 18 | 20 | 52 | 38 | 160 |
| Somerset | 39 | 282 | 67 | 215 | . 24 | 171 | 135 | 117 | 35 | 38 | 73 | 24 | 74 | 62 | 424 |
| Walan | 26 | 224 | 31 | 193 | . 14 | 170 | 162 | 98 | 37 | 39 | 87 | 51 | 69 | 78 | 365 |
| Washington | 51 | 310 | 101 | 209 | . 33 | 170 | 166 | 79 | 32 | 24 | 59 | 30 | 99 | 80 | 457 |
| York | 27 | 357 | 112 | 245 | . 31 | 198 | 186 | 104 | 39 | 50 | 88 | 60 | 149 | 165 | 495 |
|  | 512 | 4,391 | 1,094 | 3,278 | . 25 | 2,772 | 2,523 | 1,503 | 622 | 496 | 1,049 | 796 | 1,626 | 1,651 | 6,786 |

## SPECIAL COMMON SCHOOL STATISTICS--Concluded.

| Counties. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Androscoggin. | 165 | 292 | 68 | . 81 | - | 14 | 6 | \$80, 817 | \$6,929 | \$11,860 | \$6,970 | \$5,032 | \$1,048 |
| Aroostook... | 170 | 528 | 105 | . 83 | 2 | 11 | 69 | 89,738 | 5,294 | 26,485 | 2,968 | (6,881 | 732 |
| Cumberland | 351 | 608 | 55 | . 92 | 1 | 5 | 30 | 187,632 | 13, 1 , 43 | 95,97 | 20,543 | 11,235 | 1,841 |
| Frankliu | 46 | 217 | 32 | . 87 | 3 | 5 | 6 | 28,841 | 1,742 | 11,305 | 1,076 | 2,343 | 735 |
| Hancock | 109 | 403 | 52 | . 83 | 1 | 1 | 45 | 60,74 | 3,915 | 13,141. | 2,007 | 3,521 | $49 \%$ |
| Kennebec | 147 | 399 | 82 | . 83 | - | 9 | 26 | 81,291 | 5,975 | 15,376 | 10,40: | 5,105 | 4,917 |
| Knox. | 95 | 267 | 35 | . 88 | - | - | 28 | 50,258 | 3,663 | 17, 771 | 737 | 3,830 | 640 |
| Lincoln | 73 | 205 | 48 | . 81 | - | - | 6 | 30, 803 | 1,994 | 5,544 | 771 | 2,354 | 633 |
| Oxford | 112 | 381 | 73 | . 84 | - | 8 | 23 | 54,528, | 2,968 | 20,191 | 1,747, | 4,363 | 2,169 |
| Penobscot. | 251 | 686 | 132 | . 84 | 2 | 5 | 81 | 119,339 | 7,083 | 21,670 | 5,133 | 10,059 | 3, 2.29 |
| Piscataquis | 64 | 182 | 35 | . 84 | - |  | 22 | 24,849 | 1,435 | 6,841 | 671 | 1, $3 \times 3$ | 1,180 |
| Sagadaboc. | 90 | 141 | 19 | . 88 | 0 | 30 | ${ }^{7}$ | 26,960 | 4,112 | 2,609 | 340 | 2,, 88 | 509 |
| Somerset ... Waddo | $\begin{array}{r}130 \\ 54 \\ \hline\end{array}$ | 357 $3 \geqslant 4$ 3 | 67 41 41 | . 84 | - ${ }^{\text {a }}$ | 32 | 32 | 49, 2 5 \% | 3,366 | 31,386 | 1,008 | 3, 8119 | 3.2:30 |
| Washington | 163 | 366 | 91 | .80 | 1 | 7 | 19 | 72,019 | 4,623 | 18,602 | 4,957 | 4,415 | 5,566 |
| York......... | 242 | 429 | 66 | . 87 | 2 | 1 | 33 | 106,885 | 6,046 | 1,018 | 1,446 | 5,761 | 19, 734 |
|  | 2,262 | 5,785 | \| 1,001 | . 85 | 17 | 98 | 404 | \$1,107,818 | \$74,788 | \$235,443 | 8661,508 | \$76,54) | \$47,739 |

COMPARATIVE STATEMENT-I.

| Items. | 1896. | 1895. | Increase. | Decrease. |
| :---: | :---: | :---: | :---: | :---: |
| Whole number of scholars between four and twenty-one | 209,798 | 208,042 | 1,756 |  |
| Number registered in spring and summer terms. | 113,658 | 114,403 | 1,75 | 745 |
| Average attendance in spring and summer terms. | 94,623 | 95,428 | - | 805 |
| Number registered in fall and winter <br> terms | 115,510 | 115,202 | 308 |  |
| Average attendance in fall and winter terms | 95,202 | 90,254 | - | 1,052 |
| Per cent. of average attendance of whole number. | . 45 | . 46 | - | . 01 |
| Whole number different scholars registered during the year.......... | 134,140 | 135,598 | - | 1,458 |
| Number of school houses in State | 4,196 | 4,242 | - | 46 |
| Number reported in good condition, | 2,995 | 2,927 | 68 |  |
| Number having flags.................. | 1,424 | * |  |  |
| Number school houses built during the year. | 126 | 78 | 48 |  |
| Cost of same............................ | \$189,605 | \$150,187 | \$39,418 |  |
| Estimated value of school property in State. | 3,738,506 | 3,6.7,715 | 60,791 |  |
| Number of male teachers employed in summer. | 428 | 371 | 57 |  |
| Number of male teachers employed in winter. | 979 | 1,055 | - | 76 |
| Number female teachers employed in summer. | 4,261 | 4,238 | 23 |  |
| Number female teachers employed in winter | 3,698 | 3,63s | 60 |  |
| Number of teachers graduates of Normal Schools............................ | 925 | 913 | 12 |  |
| Average wages of male teachers per month, excluding board........ .... | \$34 39 | \$35 11 | - | \$.72 |
| Average wages female teachers per week, excluding board ............... | 561 | 501 | . 60 |  |
| Average cost of board per week.... | 211 | 213 | - | . 02 |
| Amount of school money raised by towns.. | 757,163 | 710,910 | 46,253 |  |
| Excess above amount required by law | 236,408 | 168,795 | 67,613 |  |
| Average amount per scholar. | 361 | 341 | . 20 |  |
| Per cent. of valuation assessed by towns for schools . .. .................. | . $002 \frac{3}{10}$ | .002 ${ }_{10}$ | . $000{ }_{10}^{10}$ |  |
| Amount available from town treasury for school year | \$852,982 | \$799,411 | \$53,571 |  |
| Amount available from state treasury for school year. | 515,742 | 516,698 | - | 956 |
| Amount derived from local funds... | 49,482 | 46,040 | 3,442 |  |
| Total school resources ..... .... .... | 1,418,206 | 1,362,149 | 56,057 |  |
| Amount expended for common schools...................................... | 1,317,717 | 1,264,870 | 52,847 |  |
| Net balance unexpended........ .... | 100,489 | 97,279 | 3,210 |  |
| Amount paid for school superinten dence | 54,727 | 57,472 | $-$ | 2,745 |

* No data.


## COMPARATIVE STATEMENT—II.

| Items. | 1896. | 1886. |
| :---: | :---: | :---: |
| Whole number of scholars between four and twenty one .. | 209,798 | 212,782 |
| Number registered in spring and summer schools. | 113,658 | 123,821 |
| Average attendance in spring and summer schools | 04,623 | 102,513 |
| Number registered in fall and winter schools. | 115,510 | 117,286 |
| Average attendance in fail and winter schools ..... ...... | 95,202 | 97, 277 |
| Per cent of average attendance of whole number..... ... | . 45 | . 47 |
| Whole number of different scholars registered for the year, | 134,140 | 146,085 |
| Number of school houses in State.... . ............. .... .... | 4,196 | 4,312 |
| Number reported in good condition - | $\underline{2,995}$ | 3,273 |
| Number sapplied with flags. | 1,4:4 |  |
| Number built during the year | 126 | 69 |
| Cost of the same .... | \$189,605 | \$53,143 |
| Estimated value of all school property | 83,738,506 | \$3,109, 745 |
| Number of male teachers employed in su | 428 | -420 |
| Number of male teachers employed in winter. | 979 | 1,640 |
| Number of female teachers employed in summer ........... | 4,261 | 5,043 |
| Number of female teachers employed in winter ............. | 3,698 | 3,023 |
| Wages of male teachers per month, excluding board. .... | \$34 39 | \$34 15 |
| Wages of female teachers per week, excluding board...... | 561 | 417 |
| Average cost per week of teachers' board . . . . . . . . . . . . . | 211 | 201 |
| Amount of school money raised by towns.................... | 754,163 | 630,223 |
| Excess above amount required by law....................... | 236,408 | 133,249 |
| A verage amount per scholar. ................. .... .... .... | 361 | 294 |
| Amount received from State treasurer........................ | 515,742 | 342,491 |
| Amount received from local funds . ........ . . . . . . . . . . . . . | 49,482 | 30,303 |
| Amount paid for school superintendence . . . . . . . . . . . . . . . | 54,727 | 31,693 |

## STATEMENT.

## Amount of School Fund and Mill Tax Apportioned to the Several Cities Towns and Plantations in the State for the Year 1896, and Payable January 1, 1897.



[^5]School Fund and Mill Tax-Continued.

| Towns. |  |  |
| :---: | :---: | :---: |
| Brooklin . | $32^{\circ}$ | \$783 80 |
| Brooks. | 236 | 57446 |
| Brooksville | 420 | 1,102, 34 |
| Brookton | 16ă | 40164 |
| Brownfield | 368 | 89577 |
| Brownville | 380 | 92498 |
| Brunswick | 2,003 | 4,875 61 |
| Buckfield |  | 74972 |
| Bucksport | 65.5 | 1,594 37 |
| Burlington | 156 | 37974 |
| Burnham.. | 295 | 71807 |
| Buxton | 487 | 1,185 43 |
| Byron............... | 57 | 13875 |
| Calais. | 2,430 | 5,914 99 |
| Cambridge | 97 | 23611 |
| Camblen ... | 696 | 1,694 17 |
| Canaan . | 330 | 80327 |
|  | 307 | 74729 51847 |
| Caribou..... ... | 1,7*3 | 4,340 09 |
| Carmel | 303 | 73755 |
| Carratunk Plantation |  | 20934 |
| Carroll... | 177 | 43085 |
| Carthage Pataion | 11. | ${ }^{272} 68$ |
| Casco ...... ..... | 281 | 68399 |
| Castine | 289 | 70347 |
| Castle Hill Plantation | 338 | 58176 |
| Caswell Plantation... | 176 | 43084 |
| Centerville | 29 |  |
| Chapman Plantation. | 147 | 35783 |
| Charleston | 277 | 67426 |
| Charlote | 116 | 28236 |
| Chelsea ... <br> Cherryfield |  | 57446 1,48970 |
| Chester ... | 162 | 39434 |
| Chesterville |  | 48683 |
| China. <br> Clifton | $\begin{array}{r}3 \times 4 \\ 84 \\ \hline\end{array}$ | ${ }^{934} 2047$ |
| Clinton | 420 | 1,022 34 |
| Codyville Plantation | 22 | 5355 |
| Columbia ${ }^{\text {che......... }}$ | 167 | 40.650 |
| Columbia Falls | 221 | 58794 |
| concord...... . . | ${ }_{2}^{104}$ | ${ }_{263} 15$ |
| Comnor Plantation | 276 79 | 67183 19230 |
| Coplin Plantation | 24 | 5842 |
| Corima .. ....... | 350 | 85196 |
| Corintl | 289 | 70134 |
| Cornish | 310 | 75459 |
| Cornville | 184 | 44788 |
| Cranberry Isles | 104 | 25315 |
| Crawford. | 51 | 12414 |
| Crystal Plantation | 180 | 43814 |
| Cumberland.... | 478 | 1,163 52 |
| Cusining. | 198 | $4 \times 196$ |
| Cutler | 205 | 49900 |
| Cyr Plantation .... | 210 | 51117 |
| Dallas Plantation. | 55 | 13388 |
| Damariscotta | 225 | 54768 |
| Dantortb | 470 | 1,144 05 |
| Dayton... | 124 | 30183 |

School Fund and Mill Tax-Continued.

| Towns. |  |  |
| :---: | :---: | :---: |
| Dead River Plantation.. | 41 | \$9980 |
| Deblois | 23 | 5598 |
| Dedbam | 99 | 24048 |
| Deering | 1,840 | 4,478 84 |
| Deer Isle | 1,404 | 3,417 55 |
| Denmark ${ }_{\text {Dennistown }}$ Plantation...... | 202 38 | 49170 |
| Dennistown Plantation... | +38 | $\begin{array}{r}924 \\ 370 \\ \hline 00\end{array}$ |
| Detroit ........ | 136 | 33104 |
| Dexter. | 800 | 1,94732 |
| Dixfield | 312 | 75946 |
| Dixmont. | 235 | 5902 |
| Dover ${ }^{\text {Dresiden }}$ | 450 | 1,095 37 |
| Dresten Drew Plantation | 303 39 | $\begin{array}{r}73755 \\ 9493 \\ \hline 98\end{array}$ |
| Durham | 330 | 80327 |
| Dyer Brook | 12 | 29696 |
| Eagle Lake Plantation | 197 | 47952 |
| Eastbrook | 86 | 20937 |
| East Livermore. | 452 | 1,100 24 |
| East Machias | 490 388 | 1,192 743 |
| Eastport | 1,778 | 4,327 92 |
| Eldington.. | 210 | 51117 |
| Eden .... | 789 | 1,920 55 |
| Eidgecomb | 236 | 57446 |
| Edinburg | ${ }^{23}$ | 5598 |
| Edmonds. | 191 | 46491 88847 |
| Elliotteville Plantation | 12 | 2921 |
| Ellsworth | 1,457 | 3,546 56 |
| Embden. | 180 | 43814 |
| Entield. <br> Etna | 371 | 90307 45519 |
| Eustis. | 145 | 85.296 |
| Exeter.... | 235 | 59.202 |
| Fairfield. | 947 | 2,305 17 |
| Falmouth. | 447 | 1,088 07 |
| Farmingdale | 1198 | - 48195 |
| Farmington <br> Fayette | 9988 | 2,429 28 |
| Flagstaff Plantation | 39 | 949 |
| Forest City | 109 | 26532 |
| Fort Fairfield | 1,623 | 3,950 62 |
| Fort Kent.. | 1,105 | 2,689 73 |
| Foxcroft | 36:3 | 8836 |
| Frankfort. | 3511 | $851!6$ |
| Franklin............ | 463 | 1,127 01 |
| Franklin Plantation | 36 | 8762 |
| Freeman. | 136 | 338104 |
| Freeport | 743 | 1,808 58 |
| Frenchville | 1,287 | 3,132 75 |
| Friendship | 25. | 61341 |
| Fryeburg. | 359 | 87387 |
| Gardiner ..... .. .... | 1,547 | 3,765 64 |
| Garfield Plantation.. | 35 | $8^{85} 18$ |
| Garland..... | 258 | 61097 <br> 615 <br> 154 |
| Gilead. . | 288 | 6165 |
| Glenburn. | $13: 3$ | 32374 |
| Glenwood Plantation | 65 | 15822 |
| Gorham . ....... | 821 | 1,998 43 |

School Fund and Mill Tax-Continued.

| Towns. |  |  |
| :---: | :---: | :---: |
| Gouldsboro. | 376 | \$915 25 |
| Graiton | 21 | 5111 |
| Grand Falls Plantation | 19 | 4625 |
| Grand lsle.... | 520 | 1,265 76 |
| Grey ....... | 396 | 96382 |
| Graenbush | 245 | $596: 37$ |
| Greene..... | 191 | 4 4i4 92 |
| Greenfield .. | 65 | 15822 |
| Greenvale Plantation. | 24 | 5842 |
| Greenville. ................ | 316 | 76920 |
| Greenwood.. | 226 | 55012 |
| Guilford. | 450 | 1,095 37 |
| Hallowell. | 787 | 1,915 68 |
| Hamion Plantation.... | 234 | 56959 |
| Hammond Plantation..... | 39 | 9493 |
| Hampden............... | 633 | 1,54081 |
| Hancock.............. | 346 | 84223 |
| Hanover. | 64 | 15579 |
| Harmony | 193 | 46979 |
| Harpswell. | 546 | 1,329 06 |
| Harrington | 398 | 96889 |
| Harrison | $2 \times 4$ | 69130 |
| Hartford. | 183 | 44545 |
| Hartland. | 290 | 71077 |
| Haynesville | 116 | 28236 |
| Hebron... | 1301 | 316 10 |
| Hermon | 440 | 1,071 03 |
| Hersey. | 80 | 21664 |
| Highland Plantation. | 34 | 8276 |
| Hirami . . . . . . . | 271 | 65965 |
| Hodgdon ....... | 425 | 1,034 51 |
| Hotrlen ....... ... | 152 | $3 \% 000$ |
| Hollis.. | 349 | 84953 |
| Hope .. | 169 | 41137 |
| Houlton | 1,297 | 3,15709 |
| Howland | 156 | 37974 |
| Hudson.. | 150 | 36513 |
| Hurricane Isle. | 78 | 18986 |
| Industry. | 170 | 41381 |
| Island Falls | 302 | 73512 |
| Isle au Hant.. | 72 | 17526 |
| Islesborough... | 334 | 81301 |
| Jackman Plantation. | 90 | 31907 |
| Jackson ............ | 131 | 31887 |
| Jay..... | 305 | 1,229 25 |
| Jefferson.. | 379 | 42255 |
| Jonesborough . | 24.9 | 60611 |
| Jonesport . . ......... | 784 | 1,901838 |
| Kenduskeag ... | 122 | -29697 |
| Kennebunk .... | 72. | 1,77206 |
| Kennehunkport. | $5 \times 6$ | 1,426 42 |
| Kingfield....... | 163 | 29677 |
| Kingman ........................ | 298 | 72537 |
| Kingsbury Plantation... | 48 | 11634 |
| Kittery | 683 | 1,66252 41868 |
| Knox . ......... . | 172 | 41868 |
| Lagrange | 212 | 51604 |
| Lake View Plantation.. | 46 | 11198 |
| Lakeville Plantation....... | 52 | $12658$ |
| Lambert Lake Plantation. | 57 | 13875 |

## School Fund and Mill Tax-Continued.

|  | Towns. |  | $\begin{gathered} \dot{n} \\ \frac{3}{3} \\ \cdots \\ 3 \\ 3 \\ 0 \\ 0 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Lamoine . . |  |  | 189 | \$460 05 |
| Lang Plantation.. |  |  | 32 | 7789 |
| Lebanon .... ... |  |  | 359 | 87387 |
| Lee ..... |  |  | 295 | 71807 |
| Leeds ... |  |  | 290 | 70590 |
| Levant |  |  | 307 | 74729 |
| Lewiston. |  |  | 7,987 | 19,441 58 |
| Lexington Plantation. |  |  | 87 | 21177 |
| Liberty ........... ... |  |  | 260 | 63288 |
| Limerick ................. |  |  | 224 | $545 \% 5$ |
| Limestone ............. |  |  | 347 310 | 84466 |
| Limington |  |  | 310 $5-3$ | $\begin{array}{r}75459 \\ 1,394 \\ \hline 17\end{array}$ |
| Lincoln Plantation |  |  | 22 | 1,5355 |
| Lincolnville.......... |  |  | 391 | 95175 |
| Linneus . |  |  | 387 | 93472 |
| Lisbon. |  |  | 1,189 | 2,894 21 |
| Litchfield |  | . | 301 | 73268 |
| Littleton. |  |  | 277 | 67426 |
| Livermore |  |  | 291 | 70833 |
| Long Island Plantation |  |  | 70 | 17039 |
| Lovell .................... |  |  | 195 | 47466 |
| Lowell. |  |  | 94 | 22881 |
| Lubec............ |  |  | 806 | 1,96193 |
| Lucllow |  |  | 128 | 31156 |
| I_yman.. | . |  | 228 | 55498 |
| Machias .... |  |  | 723 | 1,759 89 |
| Machiasport ........ |  |  | 459 | 1,11728 |
| Macwahoc Plantation. |  |  | 97 | 23611 |
| Madawaska........... |  |  | 698 | 1,699 03 |
| Madison |  |  | 628 | 1,528 64 |
| Madrid ....... |  |  | 149 | 36270 |
| Magalloway Plantation. |  | - | 16 | 38.95 |
| Manchester |  |  | 146 | 35539 |
| Mapleton ...... |  |  | 387 | 94202 |
| Mariaville.... |  |  | 85 | 20690 |
| Marion. |  |  | 40 | 9737 |
| Marshfield |  |  | 107 | 26045 |
| Mars Hill. |  |  | 406 | 98827 |
| Masardis. |  |  | 89 | 21564 |
| Mason ............... |  |  | 34 | 8276 |
| Mutinicus Isle Plantatio |  |  | 63 | 15385 |
| Mattamiscontis ........ |  |  | 10 | 2434 51360 |
| Mattawamkeag |  |  | 211 | 51360 |
| Maxfield........... |  |  | 39 | 9493 |
| Maytield Plantation |  |  | 39 | 9493 |
| Meclanic Falls ... |  |  | 389 | 82.518 |
| Meddybemps ....... <br> Medford |  |  | 63 | 12901 |
| Medford........ .... |  |  | 122 | 29696 |
| Medway |  |  | 224 | 54525 |
| Mercer Merrill Plantation |  |  | 159 | 38704 |
| Merrill Plantation Mexico |  |  | 110 | 26775 |
| Milbridge . |  |  | 219 | 533 1,45806 |
| Milfotd... |  |  | 26.6 | 1,64749 |
| Milo.... |  | . . | 324 | 78867 |
| Milton Plantation |  |  | 79 | 19230 |
| Minot ...... . . . . . . |  |  | 257 | 62558 |
| Monhegan Plantation |  |  | 29 | 7059 |
| Monmouth |  |  | 287 | 69860 |
| Monroe . |  |  | 276 | 67182 |
| Monson..... |  |  | 431 | 1,049 11 |
| Monticello. |  |  | 521 | 1,268 19 |
| Montville.......... ..... |  |  | 251 | 61097 |
| Moose River Plantation |  | . | 80 | 19473 |

School Fund and Mill Tax-Continued.

| Towns. |  |  |
| :---: | :---: | :---: |
| Moro Plantation. | 89 | \$216 64 |
| Morrill....... | 141 | 34322 |
| Moscow.... | 156 | ${ }^{379} 74$ |
| Mt. Desert | 464 | 1,129 45 |
| Mt. Vernun... | 190 | 46249 |
| Naples....... | 219 | 53308 |
| Nashville Plantation | 21 | 5111 |
| Newburg ..... ${ }^{\text {New }}$. ${ }^{\text {a }}$ | 251 | 61097 |
| New Canada Plantation | 177 | 43084 |
| New Castle...... ....... | 317 | 77163 |
| New Gloucenter. | 194 | 47292 813 |
| New Limerick | 248 | 60367 |
| Newport | 357 | 86900 |
| New lortland | 265 | 64505 |
| Newry....... | 109 | 24342 |
| New sharon.. | 2.59 | 63045 |
| New Sweden | 347 | 84466 44058 |
| Nobleborough. | 308 | 74972 |
| Norridsewock | 421 | 1,024 77 |
| North Berwick | 528 | 1,285 23 |
| Northfield. | 47 | 11441 |
| North Haven | 163 | 39676 |
| Northport.. | 191 | 46492 |
| North Yarmouth | 194 | 47223 |
|  | 780 | 1,8988 64 |
| No. 1, R. 2 , W. K. R. Plantatio |  | 13388 |
| No. 8 Plantation. <br> No. 7 Plantation | -8 | 1947 4868 |
| No. 14 Plantation | 33 | 8032 |
| No. ${ }^{2} 1$ Plantation (Hancock County) | 17 | 4138 |
| No. 21 Plantation (Washington Coun | 47 | 11441 |
| No. 33 Plantation | 59 | 14362 |
| Oakfield Plantation | 340 | 82762 |
| Oakland .... | 530 | 1,290 10 |
| Old Orehard | 162 | 40650 |
| Old Town... | 1,215 | 2,957 49 |
| Orient. | 67 | 16309 |
| Orland....... | 395 | 96149 |
| Orono..... | 878 | 2,137 18 |
| Orrington. | 338 | 822 74 |
| Otis | 70 | 17039 |
| Otisfield | 235 | 97202 |
| Oxbow Plantation. | 45 | 10354 |
| Oxford ........... | 364 | 88604 |
| Palermo | 253 | 61584 |
| Palmyma. | $2 \times 3$ | $6 \times 888$ |
| Paris. | 817 | 1,998 70 |
| P:arkman | 224 | 54525 |
| Parsonsfield | 312 | 75945 |
| Passitdumkeag | 100 | 24341 |
| Patten........ | 365 | 88447 |
| Pembroke | 512 | 1,246 29 |
| Perham Plantation. | 224 | 54525 |
| Perkins. | 12 | 2921 |
| Perkins Plantation | 27 | 6572 |
| Perry | 345 | 83979 |
| Perdi.... | 233 476 | 56715 1,15865 |
| Pnillips..... | 4.6 | 1,158 65 |

School Fund andMill Tax-Continued.


* Reduced ten per cent for neglect to make return in time.

School Fund and Mill Tax-Continued.


School Fund and Mill Tax-Continued.

| Towns. |  |  |
| :---: | :---: | :---: |
| Westmanland Plantation.... | 40 | \$ 9737 |
| Weston | 157 | 38216 |
| Westport | 121 | 29453 |
| Whitefield | 334 | 81301 |
| Whiting ..... | 187 | 45518 |
| Whitneyville... | 135 | 32860 |
| Williamsburg... | 39 | 9493 |
| W'jlimantic. | 136 | 33104 |
| Wilton. - | 48.5 | 1,1^0 56 |
| Windham... | 565 | 1,375 30 |
| Windsor.... | 241 | 5866 |
| Winn. .. Winslow | 271 68.2 | $\begin{array}{r}659 \\ 1,660 \\ \hline 9 .\end{array}$ |
| Winter Harbor. | 146 | 1,635 3 3 |
| Winterport. | 568 | 1,382 60 |
| Winterville Plantation | 68 | 16552 |
| Winthrop.. | 515 | 1,253 59 |
| Wiscasset | 50.5 | 1,229 25 |
| Woodland . Woorlstock | 446 211 | 1,045 64 |
| Woodville. | 296 | ${ }_{233} 68$ |
| Woolwich. | 239 | 58175 |
| Yarmouth . | 568 | 1,382 60 |
| *York..... | 642 | 1,562 73 |
|  | 209,491 | 509,933 05 |

* Reduced ten per cent. for neglect to make return in time.


## School Fund and Mill Tax.-Concluded.

RECAPITULATION BY COUNTIES.

| Counties. |  |  |
| :---: | :---: | :---: |
| Androscoggin. | 16,599 | \$40,404 50 |
| Aroostook | 22, 428 | 54,593 17 |
| Cumberland | 28,281 | 68,84026 |
| Hancock. | 5,109 | 12,55780 |
| Kennebec | 1f, 1026 | 29,073 53 |
| Knox... | 9.219 | 22,440 45 |
| Lincoln | 6,293 | 15,318 12 |
| Oxford. | 9,016 | 21,346 32 |
| Penobscot. | 22,050 | 53,673 07 |
| Piacataquis | 4,849 | 11,813 21 |
| Sagadahoc.... Somerset | 5,518 9,824 | 13,431 65 |
| Waldo.... | 8,691 | 23.91311 $19,69+72$ |
| Washington | 15,315 | $3 \mathrm{Br}, 27905$ |
| York .................. | 18,879 | 45,954 36 |
|  | 209,491 | \$509,933 05 |

Returns for the Year Ending June 1, 1896.


| Bowdoinham ．．．$\|\ldots . . . . . . . . . . . .$. |  |
| :---: | :---: |
| Bradford．．．．．．．．Prectinct No．1．． |  |
| Bradford | Precinct No． $2 .$. |
| Bradley |  |
| Bremen |  |
| Brewer．．．．．．．．．．． |  |
| Bridgewater．．．． |  |
| Brideton ．．．．．．．． |  |
| Brighton ．．．．．．． | Precinct No． |
| Bristol．． |  |
|  |  |
| Brooklin |  |
| Brownville ．．．．． |  |
| Brunswick ．．．．．．． |  |
| Bryant＇s Pond．．． | Woodsto |
| Buckfiehl．．．．．．．． |  |
| Bucksport |  |
| Burnham |  |
| Buxton |  |
| Calais |  |
| Cambridge ．．．．．．． |  |
| Camblen ．．．．．．．．．． |  |
| Canaan |  |
| Canton |  |
| Cape Elizabeth．． |  |
| Caribou ．．．．．．．．． |  |
|  | Newman Prec |
| Castine．．． |  |
| Cherryfield．．．．．．． |  |
| Chester ．．．．．．．．．．． |  |
| Chesterville ．．．．． |  |
| Uhina | Precinct No． |
| China ．．．．．．．．．．．．．． | Prec．13，14， 17 |
|  |  |
| Clinton $\qquad$ <br> Colnmbia $\qquad$ |  |
| Columbia Falls ． |  |
| Cornish ．．．．．．．． |  |
| Cumberland ．．．．．． |  |
| I）anforth ．．．．．．．．．． |  |
| I eetring． |  |
| Deer isle |  |
| Denmark ．．．．．．．． |  |
| Dennysville ．．．．． |  |
| Detroit．．．．．．．．．．．．． | Precinct No．3．． |
| Dexter．．． |  |
| Dixtield． <br> Dixmont |  |
|  |  |


| 1，050 00 | 50000 |
| :---: | :---: |
| 12000 | 6000 |
| 14200 | 7100 |
| 19500 | 9900 |
| 12．） 00 | 62.50 |
| 1，150 00 | 1，300 00 |
| 30650 | 20300 |
| 1，165 56 | 1，100 00 |
| 10000 | 5000 |
| 32500 | 15000 |
| 40750 | 20000 |
| 28500 | 15） 0 \％ |
| 13500 | 15005 |
| 2，830 00 | 50000 |
| 19100 | 10000 |
| 35000 | 17500 |
| 1，090 00 | 75000 |
| 21000 | 110000 |
| 92700 | 75009 |
| 1，850 00 | 70000 |
| 11000 | 50 （0） |
| 1，270 13 | 1，090 09 |
| 20000 | 15003 |
| 200 06 | 20000 |
| 1，800 00 | 3.5000 |
| 1，51400 | 1，200 00 |
| ！ 160 | $48: 21$ |
| 75600 | 55000 |
| 1，050 00 | 50000 |
| 202501 | 10000 |
| 24000 | 12500 |
| 16000 | 8000 |
| 34000 | 1700 |
| 41400 | 30000 |
| 16750 | 10009 |
| 20.00 | 10000 |
| 90000 | 51000 |
| 1，31：3 00 | 1，230 00 |
| T－3） 00 | 50000 |
| 2，660 00 | 2，700 00 |
| 750 00 | 50000 |
| 53550 | 300 （0） |
| 450 | 21672 |
| 4500 | 2250 |
| 1，53000 | 1，100 00 |
| 50000 | 25000 |
| 19600 | 9800 |


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$\stackrel{-}{\square}$

Returns for the Year Ending June 1, 1896-Continued.

| Towns. | Districts and Precincts. |  | 0 0 0 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dover..... |  | \$551 66 | \$250 00 | \$250 00 | 31 | 54 | 39 | 19 | 19 | 19 | 19 | 19 | - | - | 33 | 32 | 11 | 2 |
| East Livermore |  | 50000 | 250 | 25000 | 82 | 45 | 36 | 31 | 7 | 10 | - | 7 | 4. | $\stackrel{2}{3}$ | 3 | 3 |  |  |
| East Machias |  | 46600 | 22.500 | 22500 | 39 | 42 | 38 | 31 | 12 | 10 | - | - | 35 | 3 | 6 | 17 | 8 | 3 |
| Easton. |  | 52000 | 25000 | 25000 | 24 | 45 | 36 | 45 | 44 | 35 | 27 | 5 | 3 | 13 | 23 | 17 | 5 |  |
| Wastport ......... | .... ...... . . . | 1,368 00 | 50000 | 25000 | 38 | 75 | 56 | 46 | 56 | - 48 | -43 | $-5$ | - | - 23 | 23 8 | 383 |  |  |
| Erldington |  | 88755 | 15000 | 14377 | 24 | 58 | 45 | 46 53 | ${ }_{6}^{56}$ | 48 | 43 63 | 25 | - 40 | - | $2{ }_{2}^{8}$ | 44 | 41 | 3 2 |
| Eden .... |  | 82220 | 70000 | 25000 | 32 | 105 | 95 20 | 53 | 67 <br> 27 | 48 | 63 <br> 2.2 | 25 23 | ${ }^{40}$ | -1 | ${ }_{23}^{1}$ | $\stackrel{4}{3}$ | $\stackrel{41}{7}$ |  |
| Eilmunds |  | 18000 | 1000 | $\begin{array}{r}90 \\ -780 \\ \hline\end{array}$ | 12 | $\stackrel{27}{36}$ | 20 19 | 22 31 | 27 <br> 30 | 19 31 | 22 | - ${ }^{23}$ | $\bigcirc 1$ | ${ }_{-} 1$ | -1 | 298189 | 7 |  |
| Eliot.. | ........ ... | 357 1800 | [ 200000 | 17875 <br> 250 <br> 00 | $\stackrel{2}{36}$ | $\begin{array}{r}36 \\ 124 \\ \hline\end{array}$ | 19 120 | -31 | 30 <br> 58 <br> 8 | - | -29 | - | 85 | $\bigcirc 14$ | ${ }^{-} 66$ | 78 | 18 |  |
| Ellsworth | . . . . . . . | 1,820 <br> 200 <br> 200 <br> 20 | 1,800 1000 100 500 | 250 960 960 | 36 20 | 124 37 | 120 32 | -31 | 38 34 |  | 18 | - | $-85$ | - 14 | $-$ | 16 | - 2 | 6 |
| Etna.............. | ....... ....... | 20000 38400 | 100 500 500 00 | 9600 19200 | 20 24 | 37 89 | 32 37 | 31 | 34 46 | 40 | 32 | -11 | -34 | 3 | 24 | 10 | 2 | 6 |
| *Farmingdale.... |  | 480 480 | 25000 | 24025 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Farmington ...... |  | 1,5*0 00 | 50000 | 25000 | 36 | 102 | 85 | - 11 | 75 | 75 | - | - | 60 | - | 18 | 75 | - | 3 |
| Fayette. ......... |  | 30000 | 15000 | 150 | 47 | 75 | 16 | 11 | 12 | 10 | 1 | 10 | - |  |  | 3 |  |  |
| Forest City. .... | . .... . | 48550 | 40000 | 24275 | 39 | 56 | 85 | 27 45 | 40 55 | ${ }^{45}$ | 49 40 | 45 | 9 | - | 8 | 51 | 9 | 1 |
| Fort Fairfield. | .... ........ . | 1,305 00 | 1,000 00 | 25000 | 36 | 115 | 87 | 40 | 50 30 | 30 | 20 | ${ }^{22}$ | 22 | -5 | 25 | 45 | 12 | 13 |
| Foxcroft |  | 81000 | 8000 | 25000 | 33 | 60 | 51 <br> 32 <br> 2 | 49 |  | 89 |  |  | 12 |  | - | 26 |  | 4 |
| Franklin |  | 16000 | 10000 |  | 10 10 | 39 32 | 32 27 | 39 28 | 39 39 | 0.9 19 | 13 | 14 | 1 | - | 4 | 12 | 4 |  |
| Freedom ......... | Prec. Nos. 1, 4, 7 | 15000 | 7500 | 7500 | 16 | 32 | 27 64 | 28 | 20 | 19 |  |  | 33 |  | 62 | 71 | 18. |  |
| Freeport ......... | Pre. | $\begin{array}{r}1,469 \\ 140 \\ 140 \\ \hline\end{array}$ | $\begin{array}{r}1,200 \\ 150 \\ 150 \\ \hline 10\end{array}$ | 250 70 700 000 | 36 14 | 71 21 | 64 18 | 11 | -21 | 16 21 | 21 | 21 | $-$ | $-17$ | - | 1 | 21 | 8 |
| Friendship.... |  | 13500 | 10000 | 6750 | 12 | 25 | 17 | 25 | 21 | 18 | 6 | 9 | 4 | 60 |  | 13 | 1 |  |
| Gardiner .... ... | , | 3,400 00 | 3,900 00 | 25000 | 36 | 134 | 128 | 16 |  |  |  |  | 50 | 60 | 60 | 80 | 6 |  |
| Garfield. |  | 10000 | 5000 | 5000 | 11 | 36 | 22 | 16 | 22 | 19 | $\stackrel{29}{29}$ | 15 | - | - | 11 | 11 | ${ }^{6} 1$ | $\stackrel{3}{2}$ |
| Garland ....... | ............. | $2 \cdot 2750$ | 17500 | 11375 | 20 | 46 | 36 | 44 | 44 | 32 | 34 | 9 |  |  |  | 11 | 13 | 2 |

* Tuition paid at Gardiner and Hallowell High Schools.

| Georgetown. |  |
| :---: | :---: |
| Gorham |  |
| Gray |  |
| Greentiel |  |
| Greenville |  |
| Guilford |  |
| Hallowell |  |
| Hancock | Mt. Desert l'rec |
| Harmony |  |
| Harthand |  |
| Hartford |  |
| Harrington. |  |
| Hebron ..... |  |
| Hermon |  |
| Hollis... |  |
| Houlton |  |
| Island Falls...... |  |
| Islesboro |  |
| Jay ..... |  |
| Jefferson |  |
| Jonesboro |  |
| Jonesport |  |
| Kennebunk | Distri |
| Kennebunkport |  |
| Kingman .... |  |
| Kingrield . |  |
| Kittery ... | - |
| Lamoine. |  |
| Leeds.... |  |
| Lewiston |  |
| Liberty ${ }^{\text {a }}$ | Precinct No. 1. |
| Limerick |  |
| Limestone |  |
| Limington |  |
| Lincoln.. |  |
| Lincolnville |  |
| Linneus |  |
| Lisbon.. |  |
| Livermore |  |
| Lubec |  |
| Machias.. |  |
| Macwahoc |  |
| Madawaska |  |
| Matison. |  |
| Manchester |  |
| Masardis. |  |
| Mechanic Ealls |  |


| 15000 | 7500 | 7500 |
| :---: | :---: | :---: |
| 1,261 72 | 1,100 10 | 25000 |
| 1,750 00 | 25000 | 25000 |
| 20000 | 200) 00 | 10000 |
| 48750 | 22500 | 22500 |
| 77668 | 56000 | 25000 |
| 1,>4168 | 1,700 00 | 25000 |
| 17250 | 8990 | 8620 |
| 12500 | 12500 | 6250 |
| 53000 | 25000 | 2.5000 |
| 20000 | 10000 | 10900 |
| 29300 | 17 5 00 | 14650 |
| 48500 | 48.500 | 25000 |
| 30250 | 15000 | 15000 |
| 33009 | 20000 | 16500 |
| 1,400 00 | 120000 | 25000 |
| 35400 | 17000 | 16840 |
| 32875 | 16437 | 16437 |
| 45800 | 25000 | 24410 |
| 342 (0) | 25000 | 19600 |
| 14825 | 9000 | 7412 |
| 63750 | 40000 | 25000 |
| 38700 | 35000 | 1935 |
| 1,023, 84 | 1,000 00, | 25960 |
| $23: 00$ | 15000 | 1185 |
| 18600 | 10000 | 4300 |
| 1,050 00 | 80000 | 25000 |
| 1576 | 100 100 | 7682 |
| 28000 | 15.00 | 14000 |
| 4,700 00 | 4,700 00 | 25000 |
| 15800 | 7900 | 7300 |
| 50000 | 50000 | 25000 |
| 28400 | 15000 | 14200 |
| 68700 | 50000 | 25000 |
| 40000 | 20000 | 20000 |
| $2 \times 003$ | 30.100 | 1400 |
| 27650 | 13825 | 13825 |
| 1,421 00 | 92100 | 25000 |
| 26000 | 12500 | 12500 |
| 81000 | 55000 | 25004 |
| 1,340 00 | 90000 | 25000 |
| 12.90 | 7500 | 6450 |
| 30000 | 15000 | 15000 |
| 52450 | 25000 | 250 (0) |
| 21000 | 10.) 00 | 10500 |
| 12000 | 5000 | 5000 |
| 76362 | 50000 | 25000 |













 $\qquad$

Returns for the Year Ending June 1, 1896-Continued.


| Oakland . ...... |  |
| :---: | :---: |
| Old Orchard.... | ..... .......... |
| Old Town ....... |  |
| Orono ..... ... .. |  |
| Orrington | ..... .... .. .. |
| Oxford ... |  |
| Palermo |  |
| Paris... | So. Paris Prec.. |
| Parkman |  |
| Parsonsfield |  |
| Passadumkeag |  |
| Patten ...... .. |  |
| Pembroke... |  |
| Penobscot. |  |
| Perkins ... |  |
| Peru | East Precinct .. |
| Pera. | Western i'rec.. |
| Phillins |  |
| Pitt-field. |  |
| Pittston . |  |
| Plymonth <br> Poland | Precunct No $1 .$. |
| Portage Lake |  |
| Portlaı d ..... |  |
| Presque Isle |  |
| Princeton.. |  |
| Randolph . |  |
| Rangeley .. |  |
| Readfieh.... |  |
| Richmond. |  |
| Ripley ... |  |
| Rockland |  |
| Rockport |  |
| Rumford. |  |
| Saco... |  |
| Sanford ... |  |
| Sangerville |  |
| Scarboro ........ |  |
| Searsmont |  |
| Searsport |  |
| Shanleigh . |  |
| Sidnev |  |
| Skowhegan |  |
| Solon .... |  |
| South Berwick .. |  |
| South Porthand .. | ... . ..... ..... |


| 1,284 001 | 1,000 00 | 25000 |
| :---: | :---: | :---: |
| 60000 | 40000 | 25000 |
| 1.67357 | 1,200 00 | 25000 |
| 1,350 00 | 50000 | 25000 |
| 25000 | 15000 | 12.50 |
| 35000 | 25000 | 17500 |
| 13005 | 6235 | 6235 |
| 348 ) 0 | 25000 | 17400 |
| 17600 | 10000 | 8825 |
| 1,160 00 | 62300 | 25000 |
| 110000 | 10000 | 5000 |
| 31400 | 25000 | 15700 |
| 56250 | 25000 | 25000 |
| 19075 | 7500 | 7500 |
| 9800 | 5100 | 4900 |
| 5600 | 295 | $20^{0} 00$ |
| 7600 | 3800 | 3800 |
| 90400 | 500 (0) | 25000 |
| 1,000 00 | 75000 | 25000 |
| 37200 | 2:90 00 | 15600 |
| 13000 | 6500 | 6.300 |
| 27450 | 25000 | 9975 |
| 18500 | 100 (10) | 6750 |
| 14,351 53 | 17,4.41 53 | 25000 |
| 1,72000 | 1,500001 | 25000 |
| 50000 | 25000 | 250 (0) |
| 46800 | 22.500 | 20500 |
| 12.500 | 10000 | - 6250 |
| 22000 | 13000 | 11000 |
| 1,221 00 | 1,000 00 | 2.0000 |
| 10000 | 80 00) | 4875 |
| 3,200 00 | 1,500 00 | 25060 |
| 514400 | 50000 | 25000 |
| 626 (0) | 500001 | 25000 |
| 1,356 000 | 2,700 20 | 12.) 00 |
| 78750 | 500 Ot | 12.500 |
| 47820 | 25000 | 23722 |
| 31.500 | 50000 | 12.500 |
| $25 \times 00$ | 15000 | 12825 |
| 28800 | 50,00 | 12.500 |
| 66250 | 40216 | 250100 |
| $420) 00$ | 25000 | 21000 |
| 2.36000 | 50000 | $250)$ |
| 40675 | 20010 | $2000{ }^{\circ}$ |
| 1,25: 00 | 1,35000 | 25900 |
| 1,800 00 | 1,800 00 | 25000 |
| 22000 | 50000 | 11000 |










${ }^{1}$ 10




Returns for the Year Ending June 1, 1896-Concluded.

| Towns. | District and Precincts. | $\begin{aligned} & 0 \\ & E \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { o-1 } \\ & 0 \\ & 0 \\ & 0 \\ & \vdots \\ & \vdots \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  | $\begin{aligned} & \text { Number in Ancient } \\ & \text { Languages. } \end{aligned}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Springfield | Precinct No. 3. | \$830 50 | \$500 00 | \$250 00 | $\because 2$ | 56 | 44 | 38 | 35 | 38 | 15 | 9 | - | - | 10 | 20 | 1 | 8 |
| St. Albans.. | , | 2.5000 | 15000 | 12125 | 2 | 55 | 45 | 52 | 29 | 49 | 12 | 12 | 5 | 4 |  | 30 | 5 | 2 |
| Standish. |  | 62350 | 50000 | 25000 | 24 | 35 | 30 | 30 | 15 | 23 | 12 | 18 | 16 | - | 15 | 24 |  |  |
| Starks. | ...... ... | 30000 | 15000 | 15000 | 26 | 64 | 56 | 42 | 59 | 52 | 24 | 37 | 8 | 12 | 14 | 25 | $2 \%$ | 10 |
| Stetson. |  | 12500 | 7264 | 5850 | 10 | 31 | 28 | 21 | 24 | 20 | 24 | 4 | 5 | 12 | 3 | 12 | - | 6 |
| Steuben. |  | 20900 | 20000 | 10000 | 10 | 33 | 29 | 33 | 33 | 31 | 26 | 7 | 5 | 4 | 3 <br> 9 | 15 | - 5 | 4 |
| St. George. |  | 47109 400 | 40000 | ${ }_{9}^{235} 500$ | 31 | 52 | 36 | 42 | 19 | 33 18 | $1 \begin{aligned} & 13 \\ & 21\end{aligned}$ | - | $-{ }_{4}$ | - | 9 <br> 4 | $\stackrel{22}{27}$ | $-9$ | 1 |
| Strong Sullivan ... |  | 400 180 00 | 20000 | 200 900 90 80 | $\underline{29}$ | 31 | 28 44 | 31 49 | 18 | 18 | 21 | $-10$ | 4 | - | $-{ }^{4}$ | 27 12 | $-9$ | 1 |
| Sullivan | ......... . . . . | 180 175 170 | 200 100 00 | (1)90 <br> 87 <br> 87 | 10 | 53 | 44 33 3 | 48 | 43 30 3 | 5.3 28 | 17 | 10 | 7 | - | - | 12 | - 8 | 5 |
| Surry ....... |  | $\begin{array}{r}175 \\ \hline\end{array}$ | $\begin{array}{r}100 \\ 100 \\ \hline\end{array}$ | $\begin{array}{r}8750 \\ 050 \\ \hline 800\end{array}$ | 10 | 41 | 33 | 38 | 30 <br> 35 | 28 | 25 | 20 | 76 | -15 | $-5$. | 10 | 8 | 6 |
| Thomaston... | . | 1,480 100 100 | $\begin{array}{r}1,00000 \\ 50 \\ \hline 00\end{array}$ | 250 490 4900 | 33 | 65 21 | 53 | 20 | 35 21 | ${ }_{17}$ | $-_{5}$ | - | 16 | $-15$ | 55 | 49 | 16 6 | 4 |
| Topsham . |  | 68739 | 60000 | 25000 | 36 | 44 | 36 | 41 | - | $-1$ |  | - | 22 | 18 | - | 16 | 24 | 4 |
| Tremont |  | 36200 | 19500 | 18100 | 24 | 86 | 43 | 52 | 52 | 48 | 28 | 30 | - | - | , | 20 | 17 |  |
| Trenton |  | 12500 | 6500 | 6250 | 10 | 30 | 2 | 30 | 30 | 30 | 25 | 20 | - | - | 3 | 9 | - | 2 |
| Troy | Precinct No. 2. | 12000 | 6006 | 557 | 10 | 38 | 31 | 31 | 37 | 20 | 27 | 18 | - | - | 2 | 11 | - | 2 |
| Turner.. |  | 51000 | 45000 | 2.5000 | 44 | 104 | 26 | 14 | 17 | 16 | - | 6 | 8 | - | 5 | 20 | 3 |  |
| Union. |  | 16000 | 10900 | 8000 | 10 | 24 | 2 | 14 | 17 | 18 | 18 | - | - | - | 4 | 13 | 4 | 2 |
| Unity ... |  | 47500 | $\bigcirc 5000$ | 23750 | 40 | 86 | 45 | 73 | 86 | 70 | 42 | 23 | 15 | 4 | 16 | 28 | 5 | 12 |
| Vanceboro |  | 22750 | 2.5000 | 11375 | 16 | 38 | 30 | - | 16 | 16 | - | - | 5 | - | 21 | 16 | 16 | 2 |
| Veazie ... |  | 33500 | 15000 | 15000 | 28 | 26 | 19 | 24 | 24 | 24 | 21 | 16 |  | 24 | 24 | 5 |  |  |
| Vinalhaven |  | 1,152 OG | 95000 | 25000 | 36 | 66 | 50 |  | 40 | 34 | - |  | 21 | 11 | 37 | 38 | 24 | 2 |
| Waldoboro |  | 75000 | 50000 | 25000 | 26 | 63 | 45 | 42 | 17 | 18 | - | 19 | 20 | 22 | 8 | 38 | 8 | 6 |
| Wales.. |  | 24100 | 17408 | 12050 | 33 | 44. | 20 | 15 | 24 | 18 | 16 | 4 |  | - | 5 |  | 3 |  |
| Warren |  | 1,000 00 | 75000 | 25000 | 30 | 86 | 80 | 53 | 53 | $5: 3$ | 53 | 53 | 10 | - | 33 | 22 | 2 |  |
| Washburn. |  | 28000 | 20000 | 14000 | 20 | 41 | 26 | 291 | 25 | 15 | 14) | 24 | 10 | - | $-1$ | 17 | 2 | 11 |



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[^0]:    * It is necessary to estimate some of the items included in this total as the returns do not give the exact figures.

[^1]:    *The estimates returned by the local superintendents indicate that the sum thus wasted is $\$ 200,000$.

[^2]:    *Teachers will find the Prang Colored Papers furnish the best standards of color for educational purposes.

[^3]:    157. Did they understand the connection and relation of facts recited?
    158. Does her teaching tend to encourage pupils to accumulate facts or to develop strength?
    159. Have her pupils read some of the English classics?
    160. Have they memorized some standard selections?......short quotations?
    161. Did her teaching develop love of country, and a just regard for our best men and women?
    162. In what did she excel as a teacher?
    163. In what was she weak?
    164. In what were pupils specially proticient?
    165. In what were they particularly deficient?
    166. Does she study the methods of other teachers?
    167. Is she persistent in her efforts to learn the best methods?
    168. Is she fertile in giving variety to her work?
    169. Does she act on suggestions made to her?
    170. Is she a better teacher than she was last term?

    A $\checkmark$ means that the work covered by the questions, after which it is placed, is satisfactory.
    A + means that the work needs more attention,
    A - means that the work is unsatisfactory.

[^4]:    * No return from superintendent.

[^5]:    * Reduced ten per cent. for neglect to make return in time.

