# ANNUALREPORT 

OT THE

## EXECUTIVE COMMITTEE

## STATE NORMAL SCHOOL.

## Transmitted to tee Legislatura February 4, 1862.

ALBANY:
CHARLES VAN BENTHUYSEN, PRINTER.
1862.

## State of gind 想ork.

## No. 50.

## IN SENATE,

February 4, 1862.

## ANNUAL REPORT

OF THE EXECUTIVE COMMITTEE OF THE STATE NORMAL SOHOOL.

## To the Legislature :

Pursuant to the act, chap. 311, of the Laws of 1844 , the undersigned herewith transmit the annual report of the Executive Committee of the State Normal School, which has been received and approved: which report also contains a full statement of the receipts and expenditures of money under the same act. EMERSON W. KEYES, Acting Superintendent of Public Instruction. JOHN V. L. PRUYN,
Chancellor of the University of the State of $\mathcal{N e w}$ York. Albany, Junuary 30, 1862.

## REP0RT。

## To the Superintendent of Public Instruction <br> and the Regents of the University: <br> The Executive Committee of the State Normal School

Respectfully report as follows:

## Number of pupils and graduates.

During the past year, embracing the thirty-third and thirty. fourth terms, the whole number of pupils in attendance has been three hundred and one. Of these, the whole number of males has been one hundred and seven, and the whole number of females one hundred and ninety-four. The whole number of different pupils, who have been connected with the school from the beginning, is thus increased to three thousand six hundred and sixty-four.

The graduates of the past year have numbered sixty-six. Of these, twenty-seven were males, and thirty-nine females; the whole number of graduates from the begining is, therefor, one thousand two hundred and fifty-nine.

During the year, all the counties of the State, with the exception of four, viz, Cortland, Richmond, Rockland, and Wayne, have been represented in the school. Thirty-seven counties were represented in the graduating classes.

Number of Pupils and Graduates in Former Years.
The following table prosents the number of the pupils and the number and sex of the graduates for each year and term, from the commencement of the school to the present time:

Number of Pupils and Graduates in Former Years.


## Present Number and Classification.

The present term-the thirty-fifth in the whole number-commenced on the third Monday in September, and is now in progress. The whole number of pupils now in attendance is two hundred and eight. The sex and classification of these pupils are presented in the following table:

| Class. Seniors. | $\begin{aligned} & \text { Males. } \\ & -\quad 11 \end{aligned}$ | Females. 17. | Class Total. $28$ | Total. |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | - | 28 |
| Sub-Seniors No. 1 | 7 | 9 | 16 |  |
| " 6 6 2 | 6 | 9 | 15 |  |
| " 3 | 6 | 10 | 16 |  |
| Juniors No. 1 | 7 | 23 | 30 |  |
| $\because \quad 62$ | 10 | 20 | 30 |  |
| 6 "3 | 8 | 16 | 24 |  |
|  |  |  | - | 84 |
| Sub-Juniors No. 1 | 0 | 24 | 24 |  |
| " " " 2 | 7 | 18 | 25 | 49 |
|  | - |  | - |  |
|  | 62 | 146 |  | 208 |

The average age of these pupils is nineteen years and six months, and their average of time previously employed in teaching is six months.

The number of pupils examined for admission at the commencement of the present term, and rejected, was twenty.

## Sub-Junior Class.

The hope has been expressed that it would be practicable to dispense with the sub-junior class, in which the time is spent chiefly in an elementary drill in the lowest branches, in order that the labor expended upon this class might be bestowed upon those of a higher grade. So long, however, as, in addition to its proper work, the unnatural labor of giving mere academical instruction is imposed upon the Normal School, that hope can hardly be realized. It is not strange, then, that, notwithstanding the number of students rejected on examination, the subjunior class is increasing in number, rather than diminishing, having risen from thirty-six students-the number last term-to forty-nine-the number for the present term. The fact, also,
that these pupils, together with those of the junior class, have attained the average age of nineteen years and six months, and have taught in our public schools an average of six months, shows that they are representative teachers, and as such, must be expected to predominate; in numbers, in the Normal School. It must be confessed, further, that the fact that they are thus representative teachers, reflects by no means favorably upon the qualifications of the teachers and the standard of instruction in our public schools.

## Effects of the War.

Up to April, the proportional number of young men in the school had been on the increase. Since that time, however, the proportion has decreased. This has been due to an increased demand for teachers, resulting from the enlistment of those, at the time, employed in our schools. During no previous term have so many of our young men left the school to engage in teaching.

That the members of the school should have participated in the national enthusiasm in behalf of the Union, could not but have been expected. As a consequence, many of both the recent and former members of the school are known to be doing the country honorable service in the field. One, a young man of exemplary character and excellent promise, has already laid down his life in the fulfilment of his duty as a loyal citizen and patriot soldier.

## Course of Study.

The course of study remains the same as at the date of the last report. The modifications mentioned at that time are, so far, resulting satisfactorily.

## School Exercises.

The regular class exprcises continue to be conducted upon the topical method, as mentioned in the last report, with as much thoroughness as is practicable. Of the superiority of that method, every day's experience yields additional and convincing proof.

The general written exercises in spelling, ordinary letter writing, and grammatical construction, are carefully sustained as heretofore, and with unquestionable benefit.

With but one exception, no change has been made in the gymnastic exercises. That exception occurs in the case of the young men, who, instead of exercising once a week, as heretofore, exer-
cise daily; and who, in addition to the ordinary gymnastic exercises, are now subjected to a thorough

## Military drill.

In April military drill was introduced into the school, in connection with the gymnastic exercises of the young men. It has been steadily prosecuted, and with such signal success as to render the fact a precedent in favor of its further introduction into our schools. In addition to securing a corresponding amount of physical exercise, the military drill has developed some important points of superiority over the ordinary gymnastic exercises. Its effect upon the carriage, its tendency to produce a habit of subordination, and its power to create the highest precision and promptness in action, have been shown to be of the first order. If to this be added its military utility-a utility at the present time altogether unquestionable-its importance as a part of the normal course will be readily conceded, and the result of the experiment of its introduction be hailed with satisfaction.

## Faculty.

At the close of the last term, Leroy C. Cooley, A. M., of Cooperstown Seminary, and a former graduate of the school, was appointed to the professorship of Natural Science, which position had been temporarily filled by Ambrose P. Kelsey, A. M.

At the commencement of the present term, Mr. F. F. Müller, teacher of vocal music, resigned the position which he had occupied during the past three years to the entire satisfaction of all concerned, and the vacancy was filled by the appointment of Mr. James M. North, of the Geneseo Normal Academy of Music.

The following is a full list of the present officers of the school:
DAVID H. COCHRAN, A. M., Principal, and Professor of Moral and Intellectual Philosophy. RODNEY G. KIMBALL, A. M., Professor of Mathematics. LeROY O. COOLEY, A. M., Professor of Natural Science. - FREDERICK S. JEWELL, A. M., Professor of the English Language and Literature. WILLIAMS D. HUNTLY, A. M., Superintendent of the Experimental School.

> ALBERT N. HUSTED, Teacher of Algebra and Mental Arithmetic. JAMES M. NORTH, Teacher of Vocal Music. ISAAC W. LAKE, Teacher of Penmanship and Arithmetic. RALPH S. GOODWIN, Teacher of Elocution and Geography. LOUISA OSTROM, Teacher of History and Drawing. MARY E. BUTLER, Teacher of Geography and Reading.

Experimental School.
The Experimental school is in a highly prosperous condition, and continues to sustain its high reputation as a school of elementary instruction. There are at present in attendance 105 pupils, each paying a fee of $\$ 25$ per annum. The demand for positions in this school exceeds its capacity to accommodate pupils.

## Model Primary School.

The subject of primary education is now eliciting the earnest attention of the best educators. The influence of the first lessons upon the entire future of the child, cannot be overestimated; and the fact that the best talent developed by special and peculiar training, is required for that teaching which is strictly primary, is fast becoming appreciated. Heretofore the salary of the teacher has increased with the increasing years of his pupil; and not until recently has the truth come to be recognized in education, as in other things, that the most delicate instrument demands the brightest talent and the highest skill. That a truer estimate of teaching is being taken, is shown by the fact, that in most of the cities and large towns of the State, the primary teachers are receiving salaries equal to those paid to their associates in higher departments, so that at the present time, accompanying the growing demand for accomplished primary teachers, there is held out the inducement actually necessary to the production of its supply.

The Normal School should be able to meet this demand. The advantages derived from the Experimental Department are indispensable, yet it is the opinion of the Committee that as this
department is composed of pupils between the ages of ten and sixteen, it does not afford the facilities for culture in this purely primary teaching, which are demanded by the Normal School in order that it may meet the call now made upon it for teachers of that class.

In view of these facts, it has been thought best to establish a separate department designed to be a Model Primary School. This department is to be composed of a limited number of pupils between the ages of six and seven years, to be under the supervision of a permanent teacher, and to be taught upon the Pestalozzian method, perhaps better known as the "object system" This school will be self-sustaining, and thus, without expense to the teacher or the State, will furnish those opportunities which are so important in the education of primary teachers.

## Library and apparatus.

Two hundred and forty volumes have been added during the year to the text-book library.

The miscellaneous library has received an addition of thirty volumes upon subjects relating to the theory and practice of teaching.

With the exception of a small addition not exceeding in value $\$ 125$, the apparatus remains as at the date of the last report.

## Building.

During the year a large expenditure has been incurred for alterations and repairs. It has been found necessary to replace three of the furnaces, too much worn to be of further use, by new and larger ones, and also to make such changes in the building as, by increasing the number of recitation rooms, would furnish suitable accommodations fer the model primary school.

## Expenditures.

A statement of all receipts and expenditures from September, 1860, to September, 1861, is appended to this report, and the vouchers for every payment are in the hands of the committee.

CH. L. AUSTIN, FRANKLIN TOWNSEND, S. B. WOOLWORTH.

January 8, 1862.

## FINANCIAL REPORT.

New York State Normal School in account with Executive Committee.
1860.
 1861.

Cash from Comptroller .............................. 12,00000
Cash received for tuition in Experimental School- $\quad 2,61315$
Interest on deposits.................................. 6587
$\$ 16,507 \quad 72$
1861.

do stationery and text books................ $\quad 51013$
do mileage to students................------ 90976
do repairs to building-.......................- $1 ; 57388$

do insurance ...................................... 7000
do contingents................................. 1,79679
do support of Experimental school........... 1,427 45

$\$ 16,50772$
It is deemed proper to state that of the above balance, six hundred andenine dollars and eighty-seven cents, ( $\$ 609.87$ ) is held by the receiver of the Bank of Albany, the moneys of the school having for many years been deposited in that bank.

## DOCUMENTS

ACCOMPANYING THE ANNUAL REPORT OF THE EXECUTIVE COMMITTEE.

A, Annual Register and Circular of the State Normal School for the year ending July 14, 1859, with the names of the Executive Committee, faculty and pupils, and a list of the graduates for the same period; also an account of the qualifications for admission, the sums allowed for travelling expenses, and other matters important to be understood by the pupils and others, with the form of the diploma granted to graduates.
B, Full programme of the class exercises, as adopted at the begining of the year.
C, Examination papers for written examinations at close of 34 th term.

EXECUTIVE COMMITTEE.
Hon. E. W. KEYES, Superintendent of Public Instruction, Charman.
CHARLES L. AUSTIN, Esq., Hon. FRANKLIN TOWNSEND, SAMUEL B. WOOLWORTH, Secretary and Treasurer. Hon. ROBERT H. PRUYN.

## (A.)

Annual Register and Circular of the State Normal School Albany, N. Y., for the year ending July 11, 1861.

## FACULTY.

DAVID H. COCHRAN, A. M., Principal, and Professor of Moral and Intellectual Philosophy. RODNEY G. KIMBALL, A. M., Professor of Mathematics.
AMBROSE P. KELSEY, A. M., Professor of Natural Science. Rev. FREDERICK S. JEWELL, A. M., Professor of the English Language and Literature. WILLIAMS D. HUNTLY, A. M.,

Superintendent of Experimental School.
ALBERT N. HUSTED,
Teacher of Algebra and Mental Arithmetic.
FERDINAND F. MULLER,
Teacher of Vocal Music.
ISAAC W. LAKE, Teacher of Arithmetic and Penmanship.
RALPH S. GOODWIN,
Teacher of Elocution and Geography.
LOUISA OSTROM,
Teacher of History and Drawing.
MARY E. BUTLER,
Teacher of Geography and Reading.

## sTUDENTS.

## FEMALES.






| No. 50.$]$ | 19 |
| :---: | :---: |
| Names. | Towns. Counties. |
| Lucy C. Slade | Bethlehem .... Albany. |
| Susan A. Smith | Mount Morris. . Livingston. |
| Susan M. Smith | Plattekill .... Ulster. |
| Eleanor A. Snyder | Hillsdale ..... Columbia. |
| Josephine Snyder | Poughkeepsie - Dutches |
| Kate A. Stebbins | Little Falls .-. Herkimer. |
| Lucy Clare Steve | New York . . . . New York. |
| Philena Stinson | Cortlandt .... Westchester. |
| Kate St. John | Berne .-.-.-. Albany. |
| Margaret Sullivan | Pinckney .....- Lewis. |
| Sarah E. Sutton. | Washington -- Dutchess. |
| Elizabeth Taylor | Cairo .......- Gree |
| Helen M. Taylor | Cairo ........- Gree |
| Lavinia Taylor | Schoharie....- Schoharie. |
| Maria H. Thompson | Denmark .....- Lewis. |
| Mary L. Thompson | Ballston ...... Saratoga. |
| Mary Thorp | Napoli .-.-.-. Cattaraugus. |
| Sarah J. Tooker | Brookhaven . .- Suffolk. |
| Phebe J. Travis | Cortlandt ..... Westchester. |
| Emily Tuttle | Albany .-.... Albany. |
| Henrietta B. Tuttle | Coeymans...-- Albany. |
| Catherine I. Udell | Bethlehem .-. Albany. |
| Margaret L. Udell | Bethlehem .... Albany. |
| Helen Underwood | Chautanqua ..- Chautauqua. |
| Sybil Underwood | Chautauqua - Chautauqua. |
| Jane A. Utter | Albany .....- Albany. |
| Mary E. Vail | Sing Sing- .-. - Westchester. |
| Kate A. Vandenberg | Watervliet .-. Albany. |
| Louisa. A. Van Schaack | New Scotland - Albany. |
| Emily Voorhess | Andes ....... Sullivan. |
| Helen Voorhess | Rockland .....- Delaware. |
| Matilda Waddell | Albany .-.-.- Albany. |
| Mary E. Watson | Syracuse .-..- Onondaga. |
| Helen E. Webster | Warsaw ...... Wyoming. |
| Martha A. Weed | New York .-. New York. |
| Mary E. Weidman | Dansville ....- Livingston. |
| Harriet E. Williams | Nassau .-.-.-. Rensselaer. |
| M. Estella Whitaker | Barton .-.-. . Tioga. |
| Charlotte E. Whitmo | New York .... New York. |
| Emma Wygant. | Kingston ....-. Ulster. |
| Edgar S. Ampis | Mendon .-..... Monroe. |

MALES.

| Names. | Tomns. Counties. |
| :---: | :---: |
| James Barkley | Catskill ....-. Greene. |
| Thompson Barrick | Varick ....... Seneca. |
| Frederick A. Bayer | N. Dansville . . . Livingston. |
| Edward E. Beals | Laurens ...... Otsego. |
| Frederic P. Benchley | Newport .-... Herkimer. |
| William T. Bennett | Bethlehem . . . Albany. |
| Perry C. Bentley | Westford . .-... Otsego. |
| J. Oscar Blakely | Elma.....-. .- Erie. |
| L. Fernando Boies | Aurora .-..... Erie. |
| Francis P. Brome | Fallsburgh .-. Sullivan. |
| Orville G. Broughton | Fort Ann ...-. Washington. |
| Oscar F. Browning | Ghent .-.-... Columbia. |
| Frank Buckland | Danby .......- Tompkins. |
| Horatio G. Cass | Decatur .....- Otsego. |
| Henry Clement | Covington ...- Wyoming. |
| Franklin Cogswell | Pine Valley .-. Chemung. |
| Seaman A. Colwell | Union Vale ... Dutchess. |
| Michael R. Cook | Smyrna_-....- Chenango. |
| Justin S. Coon | Fowler ...... . . St. Lawrence. |
| Robert B. Darling | Watervliet ... Albany. |
| Aaron M. Dederick | Claverack ..... Columbia. |
| Leroy Fowler. | Brownville ... Jefferson. |
| Spencer Gause. | Clinton ...... Dutchess. |
| Hull S. Gardiner | Hamilton ...... Madison. |
| Geo. A. Germond | Schoharie .... Schoharie. |
| Willard W. Glazier | Fowler .-.-. - St. Lawrence. |
| Alanson H. Green | Berlin ....... Rensselaer. |
| John Gueren | Malone .-..... Franklin. |
| Chas. W. Hamlin | Floyd ....-.-. Oneida. |
| Franklin Hamilton | Bethany ...... Genesee. |
| Chas. G. Hampton | Sweden ....... Monroe. |
| Wallace B. Hard | Murray ...... Orleans. |
| James P. Harrington | Middlesex ..... Yates. |
| Edwin A. Hartshorn | Petersburgh .-. Rensselaer. |
| Charles K. Hetfield | Horseheads ... Chemung. |
| Edward Hicks. | N. Hempstead, Queens. |
| Henry B. Higgins | Leicester...... Livingston. |
| John Horwood. | New Scotland.. Albany. |
| Asa L. Howard. | Maine ......... Broome. |


| Names. | ns. | Connties. |
| :---: | :---: | :---: |
| Edson W. Hoyt | Sweden | Monrae. |
| Charles T. Hunter | Conesville | Schoharie. |
| George P. Husted | Pleasant Valley | Dutchess. |
| Willian . H. Jackso | Freedom | Cattaraugus. |
| Martin P. Johnson | Canaan | Columbia. |
| William H. Johnston | Whitestone | Queens. |
| Champion H. Judson | Livingstonville | Schoharie. |
| Timothy T. Kimball | Lawrence | St. Lawrence. |
| Edward Kimmey | Schodac | Rensselaer. |
| Sidney Kingsley | Sardinia | Erie. |
| William E. Lewis | Kirkwood | Broome. |
| F. Edgar Loper | Saratoga Spa | Saratoga. |
| David Lown | Red Hook. | Dutchess. |
| Buel C. Mather | Marcellus | Onondaga. |
| James Marsh | Roseboon | Otsego. |
| George McBlain | Seneca | Ontario. |
| Samuel McBlain | Sene | Ontario. |
| John J. McWilli | Elmira | Chemung. |
| Morris C. Merrim | Denmark | Lewis. |
| Horace F. Mills | Wawayanda | Orange. |
| Charles H. Moore | Sauquoit | Oneida. |
| Orrin G. Moore | Southold | Suffolk. |
| Francis A Morr | Rutland | Jefferson. |
| Ira C. Mumford | Prattsburgh | Steuben. |
| George H. Newcomb | Plattsburgh | Clinton. |
| Hiam F. Olmstead | Onondaga | Onondaga. |
| Horace M. Owen | Hector. | Schayler. |
| Benjamin E. Packar | Albany | Albany. |
| Luther B. Phelps | Gouveri | St. Lawrenc |
| Edward Pittinger | Brooklyn | Kings. |
| Joshua W. Read | Pembrok | Genesee. |
| Alonzo Read | Roxbury | Delaware. |
| John B. Reynolds | Wilna | efferson. |
| F. Germain Rice | Hamilton | Madison. |
| John R. Richards | Van Buren. | Onondaga. |
| Jesse Robinson. | Richmondville, | Scoharie. |
| Jacob Schermerb | Brunswick | Rensselaer. |
| Stephen J. Scriber | Schroeppel | Oswego. |
| John M. Scudder | Roxbury | Delaware. |
| Jacob B. Shiley | Fayette | Seneca. |



## GRADUATES

of the thirty-third term, ending January 31, 1861.
FEMALES.


MALES.

$\left.$| Names. | Post Onices. <br> Thompson Barrick.. |
| :--- | :--- | | Countiet. |
| :---: | \right\rvert\,


| Names. | Post 0ffices. Counties. |
| :---: | :---: |
| Martin P. Johnson | East Chatham. Columbia. |
| John J. McWilliams | Elmira ....... Chemung. |
| Ira C. Mumford | Prattsburg...- Steuben. |
| John B. Reynolds. | Carthage ..... Jefferson. |
| J. Milton Scudder. | Roxbury ..... Delaware. |
| George A. Shoales. | Plymouth .... Chenango. |
| Francis A. Strong. | Cornwallville - Greene. |
| Females |  |
| Males |  |
| Total |  |

## GRADUATES

of the Thirty-Fourth Term, ending July 11, 1861.

FEMALES.

No. 50. $]$ ..... 25
MALES.
Names. Post Offices. Counties.
Frederick A. Bayer Dansville Livingston.
Michael R. Cook Smyrna Chenango.Justin S. Coon.EdwardsSt. Lawrence.
Charles C. Curtiss Clinton ..... Oneida.
Franklin Hamilton Batavia Genesee.
James P. HarringtonRushvilleYates.
Buel C. Mather Marcellus Onondaga.
Samuel McBlain Seneca Ontario.
MorrisL. Merriman Copenhagen ... Lewis.
Edgar Loper Saratoga Spa. . Saratoga.
Joshua W. Read East Pembroke Genesee.
John R. Richards Marcellus Onondaga.
Joseph F. Stutterd Stafford Genesee.
Females ..... 16
Males ..... 13
Total ..... 29

## CIRCULAR.

The Normal School' of the State of New York was established by an act of the Legislature, in 1844, "for the instruction and practice of Teachers of Common Schools in the science of Education and the art of Teaching." It was first established for five years, as an experiment, and went into operation on the $18 t \mathrm{th}$ of December, 1844, in a building provided gratuitously by the city of Albany, and temporarily fitted up for that purpose. The first term opened with twenty-nine pupils, and closed with ninety: seven. The number in attendance, the second term, was about two hundred. The average number is now about two hundred and fifty.

In 1848, an act was passed by the Legislature "for the permanent establishment of the State Normal School," appropriating $\$ 15,000$ towards the erection of a suitable building. The following year an additional appropriation of $\$ 10,000$ was made for its completion. A large and commodious edifice, containing a dwelling house for the Principal, was accordingly erected on the corner of Lodge and Howard streets, adjoining the State Geological and Agricultural rooms. To this building, the School was removed on the 31 st of July, 1849.
The design of this institution is to improve the condition of Common Schools, by providing a class of teachers superior in professional scholarship and practical skill, to those ordinarily furnisbed by institutions not having this end specifically in view, and it is confidently believed from experience, that the conditions of admission, the course of study adopted, and the class drill pursued, are well calculated to secure this object.

Each county in the State is entitled to send to the school a number of pupils (either male or female) equal to twice the number of members of the Assembly in such county. The pupils • are appointed by the Assembly district school commissioners, at
a meeting called by the Superintendent of Public Instruction, on the first Mondays of February and September in each year. A list of the vacancies at the close of each term is forwarded to the commissioners, and published in the papers of the city of Albany.

Persons failing to receive appointments in their respective counties, may, upon presenting testimonials of character and talents, and sustaining the prescribed examination, receive appointments from the executive committee, provided any vacancies exist. In such case the pupil will not receive mileage.

Pupils once admitted to the school will be entitled to its privileges until they graduate, unless they forfeit that right by voluntary absence, by improper conduct, or by failing to exhibit evidences of scholarship and fair promise of success as teachers.

The following is the form of certificate of appointment which is to be given by the commissioners to each pupil appointed:

At a meeting of the school commissioners of the county of , held at on the day of
for the purpose of filling vacancies in the State Normal School, was duly appointed a pupil of that institution. (Signed by the Commissioners.)

## Qualifications of Applicants.

Females sent to the school must be at least sixteen years of age, and males eighteen, and in all cases decided maturity of mind is indispensable.

Candidates for admission to the lowest class must sustain a thorough examination in reading, spelling, the geography of the western continent, intellectual arithmetic (equal to one-half of the ordinary treatises), written arithmetic (through interest), and somuch of English grammar as to be able to analyze and parse any ordinary prose sentence.

For admission to the advanced classes, in addition to those required for entrance examination, all the studies of the preceding classes must have been accomplished. The time required to complete the course will depend on the attaiments, habits and talents of the pupil. It ought never to exceed four terms, or two years.

All the pupils, on entering the school, are required to sign the following declaration:

We, the subscribers, hereby declare, that it is our intention to devote ourselves to the business of teaching the schools of the State,
and that our sole object in resorting to this Normal School is the better to prepare ourselves for this important duty.

It is expected of the commissioners that they will select such pupils as will sacredly fulfill their engagements in this particular, and they should be made acquainted with its import before they are appointed.

The following extracts from a circular issued to the school commissioners, by the State Superintendent of Public Instruction, clearly present the qualifications which are deemed essential:
"The school commissioners are directed to give the most extended notice in their power of vacancies, and to interest themselves in finding proper pupils to be appointed.
"In mationg the selections, those who from past successful experience have proved their aptness to teach, or from traits of character, clearly developed, give fair promise of future success, should be preferred. Talents not below mediocrity, undlemished morals, and sound health, are regarded as indispensable. In your visitations of the schools you will sometimes find teachers who only need the instruction which this school is designed to give, to ensure their highest success and usefulness; or pupils who have given proof of good scholarship, which, by being properly directed, may be made of great value in the cause of education. Such teachers and scholars you will encourage to seek these appointments."

## Privileges of the Pupils.

All pupils receive their tuition free. They are also furnished with the use of text books without charge. They are, however, held responsible for their loss or injury. If they already own the books of the course, they will do well to bring them, together with such other books for reference as they may possess. Besides this, each student receives the amount designated in the following table, to defray traxeling expenses from his county seat to Albany. No pupil will receive mileage, unless the appointment is obtained from the county in which said pupil resides, such appointment being regularly made by the commissioners. This money is paid at the close of each term.

## Mileage.

The following table will show the sum a student of each county will receive at the end of the term as travelling expenses.

| Counties. | Amount paid to each pupil. | Counties. | Amount paid to each pupil. |
| :---: | :---: | :---: | :---: |
| Albany | \$0 00 | Oneida | - \$200 |
| Allegany | 931 | Onondaga | 296 |
| Broome | 521 | Ontario | 450 |
| Cattaraugus | 900 | - Orange | 265 |
| Cayuga | 374 | Orleans | 550 |
| Chautauqua | 830 | Oswego | 4.00 |
| Chemung | 698 | Otsego | 300 |
| Chenango | 370 | Putnam | 200 |
| Clinton | 550 | Queens | 375 |
| Columbia | 075 | Rensselaer | 018 |
| Cortland | 406 | Richmond | 350 |
| Delaware | 710 | Rockland | 900 |
| Dutchess | 150 | Saratoga | 090 |
| Erie | 600 | Schenectady | 045 |
| Essex | 560 | Schoharie | 150 |
| Franklin | 660 | Schuyler | 750 |
| Fulto | 152 | Seneca | 490 |
| Genesee | 550 | St. Lawrence | 600 |
| Greene | 102 | Steuben | 800 |
| Hamilton | 400 | Suffolk | 525 |
| Herkimer | 170 | Sullivan | 456 |
| Jefferson | 480 | Tioga | 650 |
| Kings | 350 | Tompkin | 510 |
| Iewis | 480 | Ulster | 200 |
| Livingston | 560 | Warren | 186 |
| Madison | 300 | Washington | 150 |
| Monroe | 460 | Wayne | 386 |
| Montgomery | 088 | Westchester | 300 |
| New York | 325 | Wyoming | 700 |
| Niagara | 575 | Yates | 636 |

## Apparatus.

The apparatus of the school is well assorted, and sufficientlyextensive to illustrate all the important principles in natural philosophy, surveying, chemistry, and human physiology. Extraordimary facilities for the study of natural history are afforded by
the museum of the Medical College and the State collections, which are open at all hours for visitors.

## Library.

Besides an abundant supply of text books upon all the branches of the course of study, a well selected miscellaneous library has been procured, to which all the pupils may have access, free of charge. In the selection of this library, particular care has been exercised to procure most of the recent works upon education, as well as valuable, standard works upon the natural sciences, history, mathematics, \&c. The State Library is also freely accessible to all.

## Terms and Vacations.

The Fall Term will begin on the third Monday in September, and continue twenty weeks.

The Spring Term will begin on the last Monday in February, and continue twenty weeks.

$$
\dot{\text { Prompt Attendance. }}
$$

As the school will open on Monday, it is desirable that pupils reach Albany on the Friday or Saturday preceding the day of opening. The faculty can then aid them in securing suitable places for boarding.

Students arriving on those days will find it to their advantage to proceed directly to the school building, situated on Lodge street near State, retaining their checks until after they have secured their boarding places, when their baggage will be delivered free of charge.

As the examination of the pupils preparatory to classification will commence on the first day of the term, it is exceedingly important that all should report themselves on the first morning. Those who arrive a day after the time, will subject not only the teachers to much trouble, but themselves also to the rigors of a private examination. After the first week, no student, except for the strongest reasons, will be allowed to enter the school.

## Price of Board.

The price of board in respectable families varies from $\$ 2.50$ to $\$ 3$, exclusive of washing. Students wishing to board themselves can procure ready furnished rooms at five shillings per week. Many pupils, by so doing, reduce their entire expenses to less than $\$ 2$ per week.

The ladies and gentlemen are not allowed to board in the same families. Particular care is taken to be assured of the respectability of the families who propose to take boarders, before they are recommended to the pupils.

## Course of Study and Text Books.

The following is the course of study prescribed for the school, and a thorough acquaintance with the whole of it on the part of the male pupils, is made a condition of graduation.

## SUB-JUNIORS.

|  | $t$ Books |
| :---: | :---: |
| Reading | Mandeville. |
| Spelling. |  |
| Wlementary Sounds of the Letters | Page's Normal Chart. |
| English Prose Composition | Quackenboss. |
| Geography and Outline Maps | Mc.Nally. |
| Intellectual Arithmetic | Davies: |
| Elementary Arithmetic | Davies. |
| English Grammar | Clarle. |
| History | Wilson. |
| Chronology, Bem's system | Miss Peabody. |
| Elementary Algebra, begun | Davies. |

JUNIORS.

| Intellectual Arithmetic | Davies. |
| :---: | :---: |
| Practical Arithmetic | Davies. |
| Geography and Map Drawing | McNally. |
| Writing. |  |
| Elementary Sounds of the Letters | Page's Normal Chart. |
| Reading | Mandeville. |
| History | Wilson. |
| English Grammar | Clark and Brown. |
| Elementary Algebr | Davies. |

## SUB-SENIORS.

| Book-Keeping | Palmer. |
| :---: | :---: |
| Higher Arithmetic | Davies' University. |
| Geometry, six books | Davies' Legendre. |
| Rhetoric | Day. |
| Drawing. |  |
| Elementary Algebra | Davies. |
| Natural Philosophy | Gray. |
| Perspective Drawing | Lectures. |
| Mathematical Geogr | Lectures. |

Constitutional Law, with select parts of the ) Young's Science of R, Statutes most intimately connected $\}$ Government ; Reviwith the rights and duties of citizens. . $\}$ sed Statutes.

## SENIORS.

| Grammatical Analysis | Clark. |
| :---: | :---: |
| Higher Algebra..... | Davies' Bourdon. |
| Plane Trigonometry, as | Davies' Legendre. |
| Surveying and Mensurat | Davies. |
| Thomson's Seasons. | Boyd. |
| Physiology | Hooker. |
| Aströnomy | Brocklesby. |
| Intellectual Philosophy | Champlin. |
| Moral Philosophy | Wayland. |
| Chemistry | Silliman. |
| Agricultural Chemistry | Norton. |
| Geology | Gray and Adams. |
| Art of Teaching | Lectures, Page, and attendance in the Experimental School. |

.It is not claimed that in order to meet the present demands of ordinary district schools, a student must complete the entire. course of study above specified. The Normal School claims to exert its most direct and powerful influence by supplying a superior grade of scholarship for the higher public schools in its graduates, but at the same time to supply the wants of a lower grade of schools, it provides an undergraduate course sufficiently moderate in its requisitions.

The studies of the Junior class are designed to prepare a higher order of teachers for the common schools generally; those who are looking for schools of a still-better grade, have before them the sub-senior course ; and for those who aim at more important positions in the higher schools, or at principalships, the Senior studies are believed to be none too complete or severe. To extend or elevate the course beyond what it now is, would be to put its completion beyond the time and means of most of those who now graduate; and more, it would simply educate the few who could complete it beyond even the reach of the higher schools, on account of the limited demand for such teachers, and the insuffcient compensation offered them. On the other hand, to modify it so as to make it less severe upon the pupils at any one time, would be to disregard the fact that it is no part of the true province of the Normal School to afford a purely academic instruc-
tion in the arts and sciences. This is the proper work of our many excellent high schools and academies, and if through their means the pupil has properly prepared himself for the Normal school course, as it must be presumed he has, no more is required of him than he ought to perform.

## Experimental School.

The object of this department is to give the Normal pupils of the Senior class an opportunity to apply in practice, under the direction of an experienced teacher, the methods of instruction and discipline inculcated in the Normal School. It has one permanent teacher, denominated the Superintendent of the Experimental School, whose labors are devoted to its management.

There are one hundred and five pupils in this departinent, whose ages range from eight to sixteen years. These pupils are divided, according to their acquirements, into five classes, and to give opportunity for alternate study and recitation, and a more complete classification, each class is further divided into two divisions, making in all ten distinct grades or classes. The pupils of the lowest class, having learned a little of reading and spelling before entering the school, commence mental arithmetic and geography. The course of study embraces the subjects usually taught in our public schools.

The teaching is performed by the members of the senior class. To give all a suitable opportunity to fix permanently in the mind the most approved methods of illustrating the subjects here taught, and to afford an opportunity for practice in school management, the Senior class is divided into sections of five in number, corresponding to the classes of the Experimental School. Each section is exercised in this school during at least two weeks, and each teacher is expected to exert all his tact, energy and skill to advance the pupils of the class placed in his charge. On entering the department and having his class assigned to him, the teacher remains as "observer" two or three days before the class is fully committed to his charge. During this time he is to learn the condition of his class and his duty, and prepare himself as well as he is able to discharge that duty. He is furnished with written instructions, embodying, as far as possible, general principles in teaching applied to his specific duties, which instructions be is to study carefully and apply in practice. The Superin-
tendent meets these teachers every morning one half hour before school, to remove any difficulties they may have found in the discharge of their duties, and to fully and freely criticise their bearing as teachers, their manner of teaching, and the matter taught. Each teacher, upon leaving this department, makes a report of the condition of his class, and a concise statement of the methods he would employ in teaching the various subjects. These reports are preserved and bound for future reference as to the success of the teachers respectively in this school. The length of time each section is employed in the Experimental Department is from two to three weeks, depending upon the number of the Senior elass.

## DIPLOMA.

## STATE OF NEW YORK, Normal School, Albany, N. Y., [date.] \}

To whom it may concern:
This certifies that A. B., having been a member of the Stato Normal School, and having completed the prescribed course of study, is deemed by the Faculty of the Institution to be well qualified to enter upon the duties of a teacher.
[Signed by each member of the Faculty.]
In accordance with the above certifieate, we the Executive Committee, have granted this Drploma.
[Signed by each member of the Executive Committee.]
[By an act of the Legislature, passed April 11, 1849, " every teacher shall be deemed a qualified teacher who shall have in possession a Diploma from the State Normal School.'']

## (B.)

The following are the Programmes of Exercises of the fall term. They remain the same for the spring term, except that the exercises commence one hour earlier:

PROGRAMME:
FOR FIRST THIRD OF FALK TERM-SIX WEEKS.

| 9 A. M. to 9.20............... Opening Exercises. |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Seniors | Geology | Prof. Cooley. |
|  | Sub-Seniors, No. 1....\% | Geometry | Prof. Kimball |
|  | Sub-Seniors, No. 2.:... | Algebra .................. | Mr . Husted. |
| 9.20 to 10...... | .Sub-Seniors, No. 3..... | Science of Government... | Prof. Jewell. |
|  | Juniors, Div. A | Gramma | Mr. Lake |
|  | Juniors, Div. B | Reading ................ | Mr. Goodwin. |
|  | Juniors, Div. C | Reading ................. | Miss Butler. |
|  | Sub-Juniors | History. | Miss Ostrom. |
| 10 to 10.10.................. Rest and change of Classes. |  |  |  |
|  | Seniors | Theory and Practice. | Principal |
|  | Sub-Seniors, No. 1..... | Science of Government. | Prof. Jewell. |
|  | Sub-Seniors, No. 2.... | Natural Philosophy...... | Prof. Cooley. |
|  | Sub-Seniors, No. 3..... | Geometry ............... | Prof. Kimball. |
| 10.10 to 10.50.. | Janiors, No. 1......... | Algebra, ................ | Mr. Husted. |
|  | Juniors, No. 2......... | Arithmetic.............. | Mr. Goodwin. |
|  | Juniors, No. 3......... | Arithmetic.............. | Mr. Lake. |
|  | Sub-Juniors, No. 1..... | Composition.............. | Miss Butler. |
|  | Sub-Juniors, No. 2..... | Composition, ............ | Miss Ostrom. |
| 10.50 to 11................... Rest and change of Classes. |  |  |  |
|  | Seniors............... | Intellectual Philosophy.. | Principal. |
|  | Sab-Seniors, No. 1..... | Natural Philosophy | rof. Cooley. |
|  | Sub-Seniors, No. 2..... | Geometry............... | Prof. Kimball. |
| 11 to 11.40.... | , Sub-Seniors, No. 3..... | Drawing -................. | Miss Ostrom. |
|  | Juniors, No. 1......... | Arithmetic............. | Mr. Lake |
|  | Juniors, No. 2......... | Intellectual Arithmetic... | Mr. Goodwin. |
|  | Juniors, No. 3......... | Intellectual Arithmetic... | Mr. Husted. |
|  | Snb-Janiors ........... | Arithmetic. | Miss Butler. |
| 11.40 to 12................... Recess. |  |  |  |
|  | Seniors, ............... | Logic of Mathematics.... | Prof. Kimball |
|  | Sub-Seniors, No. 1..... | Drawing ................. | Iiss Ostrom. |
|  | Sub-Seniors, No. 2..... | Rhetoric | Prof. Jewell. |
| 12 to 12.40.... | .Sub-Seniors, No. 3.... | Natural Philosophy...... | rof. Cooley. |
|  | Juniors, No. 1......... | Geography .............. | Mr. Lake |
|  | Juniors, No. 2......... | Algebra.................. | 97. Hasted. |
|  | Juniors, No. 3......... | Algebra.................. | Mr. Goodwin. |
|  | Sub-Juniors. | Grammar . . . . . . . . . ... | Miss Butler. |
| 12.40 to 1.15................. Calisthenies and Sub-Lectures. |  |  |  |
|  | Seniors...... .......... | Chemistry............... | rof. Cooley. |
|  | Sub-Seniors, No. 1..... | Algebra ............... | ir. Husted. |
|  | Sub-Seniors, No. 2..... | Drawing | Miss Ostrom. |
| 1.15 to 1.55.... | . Sub-Seniors, No. 3..... | Higher Arithmetic. ...... | Prof. Kimball. |
|  | Jupiors, Div. A. | Reading ................. | iss Butler. |
|  | Juniors, Div. B........ | Grammar | rof. Jewell. |
|  | Janiors, Div. C......... | Grammar............... | Mr. Lake. |
|  | Sub-Juniors . | Geography ................ | Mr. Goodwin |

## PROGRAMME:

## FOR SECOND THIRD OF FALI TERM——SIX WEEES.



10.50 to 11...................... Rest and Change of Classes.

Seniors................. Intellectual Philosophy .. Principal.
Sub-Seniors, No. 1..... Natural Philosophy...... Prof. Cooley.
Sub-Seniors, No. 2..... Geometry.................. Prof. Kimball.
11 to 11.40.....Sub-Seniors, No. 3..... Algebra .................... Mr. Husted.
Juniors, Div. A........ Grammar . .................. Mr. Lake.
Juniors, Div. B........ Grammar ..................... Prof. Jewell.
Juniors, Div. C........ Reading ................... Miss Butler.
Sub-Juniors............ Arithmetic................ Mr. Goodwin.
11.40 to $12 . .$. .......................................

Seniors................. Higher Mathematies...... Prof. Zimball.
Sub-Seniors, No. 1..... Algebra ................... Mr. Husted.
Sub-Seniors, No. 2..... Rhetoric .................. Prof. Jewell.
12 to 12.40.... Sub-Seniors, No. 3.... Natural Philosophy...... Prof. Cooley.
Juniors, Div. A........ Reading ................... Miss Butler.
Juniors, Div. B........ Reading .................... Mr. Goodwin.
Juniors, Div. C........ Grammar.................. Mr. Lake.
Sub-Juniors. . . . . . ..... History $\cdot . . . . . . . . . . .$. .... Miss Ostrom.

1.55 to 2.

Dismission.

## PROGRAMME.

## KOR THE LAST THIRD OF THE FALL TERM.



1. 験 to 2000........................... Dismission.

## Programme of Afternoon Exercises.

All the afternoon exercises of the Fall Term commence at $3 \frac{1}{2}$ and close at $4 \frac{1}{2}$. In the Spring Term they take place one hour later.

Instruction in vocal music :
$\left.\begin{array}{l}\text { Senior and Sub-Seniors on Mondays and Fridays _- } \\ \text { Juniors and Sub-Juniors on Tuesdays and Fridays_- }\end{array}\right\}$ Mr. North
Compositions are required from each pupil once in three weeks, commencing with the third week, and ending with the eighteenth week, thus making six compositions during the term.

The compositions are corrected as follows:
The Seniors'
by Prof. Jewell.
Sub-Seniors' No. 1......-...-.-.-........... Prof. Cooley.
Sub-Seniors' No. 2.-.......................... Prof. Kimball.
Sub-Seniors' No. 3.......-..................... Mr. Husted.

Juniors' No. 2 .-.-.-........................ Miss Ostrom.
Juniors' No. 3 .-...-.-.......................... Mr. Goodwin.
Sub-Juniors' -.................................. Miss Butler.
Selected compositions are publicly read every third Wednesday, commencing the fifth week, and ending with the twentieth, thus making six times. A list showing these selections will be found on the following page. At this exercise, all the teachers, as well as pupils, are expected to be present.

Field exercises, with surveying and engineering instruments, are given to the gentlemen of the senior class, by the Professor of Mathematics. These exercises consist of land surveying, with trigonometrical and other methods of areas, and heights and distances --taking levels for railroads and canals, calculations for excavations and embankments, and locating and describing curves. The object of these exercises is to make the pupils familiar with the use of instruments, and their application to the purposes for which they are designed.

In the afternoon of those Wednesdays which are not otherwise occupied, lectures are given by the several teachers, to the classes, on such subjects as are peculiarly appropriate to their duties in the school, and those of the profession for which they are preparing.

## ESSAYISTS.

During the year the essays of the following persons have been selected for the public exercises of the school. The figures opposite the names indicate the number of essays read by each individual respectively.

Writers selected for the Wednesdays of the 33d term:

## Seniors. Sub-Seniors.

Mr. L. Fowler ............... 1 Mr. F. E. Loper ............. 1
Mr. J. Gueren ............... 2 Mr. F. A. Morrison .......... 1
Mr. C. B. Hamlin............ 2 Mr. A. Read.................. 1
Mr. W. H. Jackson ......... 1 Mr. J. Richards ............ 1
Mr. M. P. Johnson ........- 3 Miss S. C. Bartley ......... 1
Mr. J. C. Mumford .......... 1 Miss T. H. Bostwick........ 1
Mr. J. B. Reynolds ......... 1. Miss L. J. W. Caldwell _.... 3
Mr. J. M. Scudder ........... 1 Miss S. Courtney............ 2
Mr. G. A. Shoales .-. .-.... 2 Miss E. S. Denroche ........ 1
Miss E. R. Adams ........... 1 Miss S. J. Flewellin ........ 1
Miss M. V. Freeman ........ 1 Miss H. E. Gillette ......... 1
Miss P. M. Hargraves....... 1 Miss S. A. Hallock ......... 2
Miss C. A. Hunt ........... 2. Miss L. V. Hoag ............. 4
Miss E. Jones .............. 1 Miss S. B. Huntington.....-- 1
Miss J. Snyder.............. 2 Miss M. Sullivan............. 1
Miss S. E. Sutton .......... 2 Miss M. L. Udell ............ 1
Miss L. Taylor............... 2
Miss M. R. Thorp .......... 3
Miss H. Underwood ........ 2
Junior.
Sub-Juniors.
Miss M. S. Ogden .........-1. Miss L. L. Lown .-......... 3
Miss L. C. Stevens ........ 1
Writers selected for Wednesday exercises of 34th term:
Seniors.
Mr. M. R. Cook
2. Mr. S. McBlain2

Mr. J. S. Coon ............... 2 Mr. J. W. Read .............. 3
Mr. H. Clement .............. 1 Mr. J. Richards 1
Mr. B. F. Hamilton 1 Mr. J. B. Reynolds ..... 2
Mr. J. P. Harrington 1 Mr. J. F. Stutterd ..... 2
Mr. F. E. Lioper 2 Miss T. H. Bostwick ..... 1
Mr. H. F. Mills 1 Miss L. J. W. Caldwell ..... 2


Examinations.
The examinations at the close of each term are, in part, written, and in part oral. The questions for the written examina. tions are prepared under the direction of the executive committee, and first presented to the teachers as well as pupils at the time of their examinations. The answers to the questions of each paper are written out at one sitting, the pupil having no opportunity to obtain assistance from text books or fellow pupils. The oral examinations occupy the last three days preceding the closing exercises of each term.

The following are the papers for the written examination at the close of the 34th term:

New York State Normal School,-Thirty-Fourth Term, July, 1861.

Chemistry.-Senior Class.
Time-Five Hours.

1. Define Chemistry.
2. State the Atomic Theory.
3. Describe the different modes in which heat is communicated.
4. Explain the formation of dew.
5. Define the terms, heat of fluidity, specific heat, symbol, equivalent.
6. Write out the four laws of chemical combination.
7. What is the rule for naming the compounds of oxygen?
8. Give the rule for naming the salts of the oxygen acids.
9. Give the symbol, equivalent, density, mode of preparation, physical and chemical properties of chlorine and its uses.
10. From one ounce Troy of water, how many cubic feet of oxygen gas can be obtained?
11. Explain the term isomerism, and illustrate by examples.
12. What is the cause of the diminution of the fertility of soils in civilized countries, and what is the remedy?

> Geologx.-Senior Class.

Time-Five Hours.

1. Define Geology, mineral, rock.
2. Define stratification, lamination, seams, bed.
3. Define joints, cleavage, vein, dyke.
4. Define dip, strike, fault, anticlinal line.
5. Give the principal divisions of the stratified rocks.
6. Give the New York rocks in their order, commencing with the lowest.
7. What rock makes the southern shore of Lake Ontario, and what the southern boundary of the State?
8. What is a fossil, cast, mould; and what minerals most frequently make the fossils?
9. What are the principal divisions of the animal kingdom?
10. What are the leading forms of life in the different geological periods?
11. What are the great causes of geological changes?
12. What is the doctrine of internal heat?

> Physiology-Senior Class,
> Time-Five Hours.

1. Give some of the distinctions between organized and unor ganized matter.
2. Give some of the distinctions between animals and plants.
3. How do the serous and mucous tissues differ in office?
4. What is the number, situation and office of the salivary glands?
5. How is common salt concerned in the process of digestion; and to what change is the food subjected in the stomach?
6. Give the name, situation and office of the valves of the heart.
7. Name the bones of the upper extremities in their order of position; also, of the lower extremities.
8. Name the bones of the skull, and state their positions.
9. What is the office of the liver?
10. What differences are there between the digestive organs of carnivorous and herbivorous animals?
11. Describe the lungs and their offce.
12. How are the nutritive properties of the food introduced into. the blood?

> Moral Phlósophy.-Senior Class.
> Time-Five Hours.

1. Define Moral Science.
2. Define law, and give its signification in ethics.
3. What constitutes a moral agent'?
4. Whence do we derive our notion of the moral quality of actions?
5. Is conscience a sufficient moral guide?
6. Define natural religion, and state its defects as a system of moral instruction:
7. What means have we of obtaining a knowledge of God's will concerning man?
8. State the doctrine of general consequences.
9. What are the relations of man to the moral law, and how far is he responsible?
10. State the difference between morality and piety.
11. What relations do individuals in society sustain to each other.
12. Is it the duty of the civil magistrate to enforce the observance of the sabbath? Why?

Englisil Avalysis.-Senior Class.
Time-Five Hours.

1. Define English Analysis; show to what field it is confined; and specify the four general operations involved.
2. Define the Sentence; designate the general elements which enter into its structure; and define the same.
3. State the classes of elements in the sentence; define the classes ; give the sub-division of the classes; and define the specific elements appearing in the subdivision.
4. Indicate, in a tabular form, the classification of sentences, according to the four principles of classification.
5. Define the Phrase; and specify the general elements which enter into its structure.
6. Name the classes of elements composing the Phrase ; describe the classes; give the subdivision of the classes; and define the specific elements which make up the phrase.
7. Show, in a tabular form, the complete classification of Phrases, according to the four principles of classification.
8. Present, in a tabular form, the complete construction of this sentence:
"Nature from her seat,
Sighing through all her works, gave signs of woe That all was lost."
9. Present, in a tabular form, the complete construction of the words in this sentence:
"Slowly and sadly they climb the distant mountain, and read their doom in the setting sun."
10. Construct, in diagram, this sentence:
"But that I am forbid
To tell the secrets of my prison-house, I could a tale unfold, whose lightest word Would harrow up thy soul."
11. State, in brief, the benefits resulting from the use of diagrams in English Analysis.
12. State the advantages resulting from the study of English Analysis, over and above those derived from the study of English Grammar as commonly pursued.

Science of Government.-Sub-Senior Class.
Time-Five hours.

1. Define Government, Rights, Liberty.
2. Give the classification of Governments, Rights, Liberties.
3. Define Monarchy, Republic, Democracy.
4. Define Constitution.
5. Describe the legislative department of the United States Government, qualifications and terms of office of its members.
6. Give the qualifications required to render a person eligible to the office of Chief Executive of the United States.
7. Describe the mode of election of the President of the United States.
8. What persons are enumerated in the apportionment of representatives and direct taxation?
9. When was the Constitution adopted, and by how many states?
10. What are the different kinds of industry, and how do they concur in production?
11. What is division of labor, and what advantages result from it?
12. What are banks, and what are their advantages?

> Natural Philosophy.-Sub-Senior Class.
> Time-Five hours.

1. Define Natural Philosophy.
2. Give the formulæ for bodies moving under the influence of gravity. A body has been falling during 16 seconds, through what distance has it fallen, and what is its terminal velocity?
3. A train of cars passing down an inclined plane 300 feet long and 25 feet high, was held back by an engine exerting a force of 10 tons; what was the weight of the train?
4. Define specific gravity, and explain the method of obtaining the specific gravity of a solid heavier than water.
5. A chain of pure gold displaces six ounces of water, required the solid contents of the chain.
6. A boat is moving at the rate of five miles an hour, how much greater resistance must it overcome when moving at the rate of 15 miles an hour?
7. I wish to obtain a flow of 25 cubic feet of water per second, through an aperture of 10 square inches; how far below the surface of the fluid must the aperture be made?
8. Describe Bramah's Press, and give the law of equilibrium.
9. Describe the Barometer. At the top of a mountain, water boils at $200^{\circ} \mathrm{F}$., required the height of the mountain.
10. At a given place, the mean height of the barometer is $27 \frac{1}{2}$ inches; what is the elevation of the place above the level of the sea?
11. Define Refraction, Reflection, and the Index of refraction.
12. A cannon ball falls the distance of three feet in passing through a horizontal distance of 300 rods; with what velocity was it moving?

## Arithietic.-Sub-Senior Class.

Time-Five hours.

1. Express in decimal form by figures-Fifteen, and four thousand seven hundred-thousandths. Express in decimal form by figures-Sixty-nine thousand fifteen, and fifteen hundredthousandths.
2. Write in words 16.01001007 ; also 0.0000002 .
3. Divide twenty-four and nine millionths, by nine and one hundred trillionths.
4. What sum, at 6 per cent., will gain $\$ 59.76$ in 1 yr. 8 m .27 d.?
5. What sum, at 9 . per cent., will amount to $\$ 3569.47$ in 1 yr . 8 m .12 d .?
6. Explain the method of obtaining the greatest common divisor of two or more numbers.
7. Explain in full, the method of extracting the square root of a number; the cube root.
8. What is the square root of $\frac{s 2}{50}$ ?
9. What is the cube root of 187.946 ?
10. The population of a city whose gain of inhabitants, in five years, is 25 per cent., is 87500 , what was it five years ago?
11. Explain the method of obtaining the least common multiple of two or more numbers.
12. What constitutes the difference between bank discount and true discount?

## Geometry and Mensuration.-Sub-Senior Class.

Time-Five hours.

1. The diagonals of a parallelogram bisect each other. Required the proof.
2. Prove that one, and only one, circumference may be made to pass through any three given points not in the same straight line.
3. Through a given point draw a tangent to a given circle.
4. Prove that similar triangles are to each other as the squares described on their homologous sides.
5. Through a given point, in a given angle, draw a line so that the segments comprehended between the point and the two sides of the angle shall be equal.
6. Prove that the area of a regular polygon is equal to its perimeter multiplied by half the radius of the inscribed circle.
7. What is the circumference of a circle whose inscribed square is ten inches? Give the proof.
8. What is the volume of a frustum of a square pyramid whose length is 18 feet 8 inches, the sides of the greater base is 27 inches, and that of its less is 16 inches?
9. Distinguish between axioms and postulates.
10. What is the area of a field whose sides are 300,700 , and 500 feet?
11. To draw a tangent to a given circle, through a given point.
12. The parallel sides of a meadow, in the form of a trapezoid, are 786 feet and 473 feet, the altitude or breadth is 986 feet-required the area. Give the geometrical proof.

## Algebra.-Sub-senior Class. <br> Time-Five Hours.

1. Prove that $7^{\circ}=1$. Give a general proof.
2. In what eases will the exact division of one polynomial by another be impossible? Give the reasons.
3. What is the least number of terms possible in the product of two polynomials, and what is the greatest number? Give the reasons for your statement.
4. Give the rule for the solution of equations of the first degree.
5. Given

$$
\left.\begin{array}{c}
\frac{x-2}{3}-\frac{10-x}{3}=\frac{y-10}{4} \\
\frac{2 y+4}{3}-\frac{2 x+y}{8}=\frac{x+13}{4}
\end{array}\right\} \text { to find } x \text { and } y \text {. }
$$

6. What is the sum of $\sqrt{ } 3 a^{5} b c^{2}, \sqrt{\frac{\sqrt{16 a^{3} b^{3}}}{3}}$, and $\sqrt{\frac{\overline{16 a b^{3} c^{2}}}{3}}$ ?
7. Give the general rule for the solution of complete equations of the second degree containing but one unknown quạtity.
8. Solve the equation, $a x^{2}-\frac{a c}{a+b}=c x-b x^{2}$.
9. Give the four forms for equations of the second degree containing but one unknown quantity, and the conclusions drawn from them.
10. What are the factors, and what is the equation of which the roots are 5 and - $4 \frac{1}{4}$ ? Explain the mode of obtaining the answers.
11. Solve the equation $x-\forall \mathcal{V} x=20$, and give the general rule for the solution of trinomial equations.
12. Divide $\sqrt[3]{ } a^{3} b^{2}$ by $\sqrt[4]{\sqrt{2}} a^{2} b^{3}$, and explain the whole operation.

## Geography.-Junior Class. <br> Time-Five Hours.

1. Name the grand divisions of the earth, in the order of their size.
2. What is the distinction between a natural and a political division?
3. Name the natural divisions of land, and define each.
4. Which way do the peninsulas generally point, and what are the exceptions?
5. Define a great circle.
6. How many zones are there, and what is the width of each?
7. Why are the tropics placed $23 \frac{1}{2}$ degrees from the equator, and the polar circles $23 \frac{1}{2}$ degrees from the poles?
8. What are the causes of the change of seasons, and of the inequalities of days and nights?
9. Draw an outline map of North Areerica, and also, one of Europe.
10. Draw an outline map of Virginia and Maryland, same size.
11. Draw an outline map of New York State, upon the same scale as No. 10.
12. How does France compare in size with the State of New York?

## History.-Junior Class. <br> Time-Five Hours.

1. What were the four great empires of antiquity?
2. What was the influence of the battle of Arbela upon the history of Asia and Europe?
3. Mention the battles which gave to the Grecian States their military renown.
4. What peculiarly distinguished the reign of Augustus, in Roman history?
5. Give some account of Hannibal and the wars in which he was engaged.
6. What were the Crusades, and what was their influence?
7. Describe the Feudal System?
8. How did the Norman line of Kings obtain the throne of England, and how did it afterwards become united with the Saxon?
9. What important change occurred in the character of the

English government during the reign of King John? also in the time of William and Mary?
[Senate, No. 50.]
10. State some of the causes which gave rise to the thirty years' war, and also the time of its beginning.
11. Mention the principal events and persons belonging to the 8 th, 10 th, 14 th, 15 th, 16 th and 17 th centuries.
12. What causes led to the American Revolution?

## English Grammar.-Junior Class.

Time-Five Hours.

1. How do you decline the Personal Pronoun, $I$, through all its persons, numbers, cases and genders.
2. Conjugate the verb, $d o$, in the Indicative Mode, Progressive Form, Interrogative and Negative; also, give the first person singular of the verb drink in each tense of the indicative mode.
3. What is a Participle, what are its various double. offices, and by what kinds of adjuncts may it in each case be modified?
4. What are Words of Euphony; what are their different offices, and how are they construed?
5. What are the pecularities of the double relative, what; in what different elements may it appear; how is it to be construed; and what Rules of Syntax apply to it?
6. How do you construe the words there, and there, in this sentence?
"There are no idlers there."
7. How is the following sentence to be parsed?
"To be, contents his natural desire."
8. What is the fault in the following sentence; how do you correct it; and what is the rule to be applied ?
"I know a bank, whereon the wild thyme blows, Where ox-lips and the nodding violet grows."
9. How do you define the Word, the Phrase, and the Sentence?
10. What are distinct words, phrases, and sentences, occurring as elements in the following complex sentence?
"Oh! who would heed the chilling blast, That blows o'er time's eventful sea,
If bid to hail its perils past,
The bright wave of eternity."
11. How do you construct the last sentence given, in diagram?
12. What is the object for which the diagram is used?

## Arithmetic.-Junior Class. Time-Five Hours.

1. In 37 miles, 3 rods, 11 feet, bow many links?
2. How many circumferences in 18964634 seconds?
3. Divide $\frac{4}{9}$ by $\frac{7}{8}$ and explain the operation.
4. What is the sum of $\frac{3}{4}$ of a mile, $\frac{3}{4}$ of a furlong, and $\frac{1}{4}$ of a foot?
5. What is the value of 6 of an acre in integers of lower denominations?
6. Express decimally $999 \frac{12}{15}$ per cent., $\frac{2}{5}$ per cent., and 106 per cent.
7. A note of $\$ 143.05$ dated July 29,1850 , is on interest at 7 per cent. On the note are the following payments, viz:

February 6, 1857..................... $\$ 30$.
March 1, 1858......................... $\$ 40$.
January $9,1861 \ldots \ldots . .$.
How much is due on this note, July 11, 1861 ?
8. Required the time when the following note will become legally due, and the bank discount, provided it was discounted May 16, 1856, at 7 per cent. :

Chicago, April 16, 1856.
One hundred and twenty days after date I promise to pay to James Jameson, Eight hundred and ninety $\frac{50}{100}$ dollars, at the Commercial Bank.

JOHN JONES.
9. At what per cent. discount, must government 5 per cent. stock be bought, that the investment may yield 7 per cent.?
10. Define Fractions, Vulgar, and Decimal. Express in words 189640013003401 ; also, 10000010004.
11. From 101 take 99 and explain the operation.
12. Divide $£ 3608 \mathrm{~s} .4 \mathrm{~d}$. by 73 , writing out the operation.

Algerra.-Junior Class.
Time-Five Hours.

1. Give the various signs used in algebra, and explain the office of each.
2. What is a homogeneous polynomial? Give an illustration.
3. Explain the rule for subtraction.
4. Give the Theorems relating to the square of the sum, the square of the differenco, and the difference of the squares of two quantities, and stato their practical application.
5. Give the rule for division, and divide $10 a^{3} x^{2}-5 a^{4} x+5 a x^{4}$

$$
-x^{5}-10 a^{2} x^{3}+a^{5} \text { by } 3 a x^{2}-x^{3}-{ }^{3} a^{2} x+a^{3} .
$$

6. Name the different kinds of equations, and define each.
7. Solve the equation $\frac{1}{2}(x+1)+\frac{1}{3}(x+2)=16-\frac{x+3}{4}$.
8. Find the values of the unknown quantities in the equations

$$
\begin{aligned}
& x+\frac{7}{2} y+\frac{1}{3} z=32, \\
& \frac{1}{3} x+\frac{1}{4} y-5=10-\frac{1}{5} z, \\
& \frac{1}{4} x+\frac{1}{5} y+\frac{1}{6} z=12 .
\end{aligned}
$$

Mention the different modes of eliminating.
9. Solve the equation $\frac{x+12}{x}+\frac{x}{x+12}=5 \frac{3}{15}$.
10. Add the quantities $\frac{\sqrt{16 a^{8} b^{2} c^{3}}}{5} ; \sqrt{\frac{1}{45} \times a b^{3} c^{3}}$, and $\frac{\sqrt{4 a^{12} b^{3} c^{15}}}{\sqrt{5}^{5}}$.
11. Give the general form for a complete equation of the second degree; also, for an incomplete equation of the second degree.
12. Extract the square root of the polynomial $10 x^{4}-10 x^{3}-$ $12 x^{5}+5 x^{2}+9 x^{6}-2 x+1$.

History.-Sub-Junior Class.
Time-Five Hours.

1. Give some accounts of the earliest attempts, on the part of the English, to colonize this country, and contrast the different motives which influenced the settlers of Massachusetts and those of Virginia.
2. When, and by whom, was New York settled? Louisiana? Florida?
3. What gave rise to the French and Indian war?
4. Give an account of Braddock's defeat; of the capitulation of Fort William Henry; also of the capture of Quebec.
5. What was the Stamp Act?
6. What foreign aid did both the Americans and the English receive during this war?
7. Give an account of the Battle of Saratoga, and its influence.
8. What terminated the Revolution, and when and where was the treaty of peace signed?
9. Mention the original States of the Confederacy.
10. Give some account of the treason of one of the American generals during the Revolution.
11. What reasons led the States to abandon the Confederacy, and form a national government?
12. What led to the war of 1812 ?

## English Grammar.-Sub-Junior Cldas. Time-Five hours.

1. What is English Grammar, and what are its divisions?
2. How many, and what are the Parts of Speech; and of these, which are modified, and which not?
3. In what different ways, regular and irregular, are the plurals of nouns formed?
4. How are Adjectives classified; and in what points is this classification different from the common mode?
5. What is the complete declension of the Personal Pronoun?
6. What is the complete conjugation of the verb go, in the Indicative Mode, Interrogative, Progressive Form, Negative?
7. What is the conjugation of the verb drive, in the Passive Voice, Potential Mode, Negative Form?
8. What is a Participle; what are its various double offices; and by what different kinds of adjuncts may it be modified in each of these cases?
9. How does the Participle proper, differ from the Participial Noun, and the Participial Adjective?
10. What are the Parts of Speech, their classes, and modifications, in this example?
"That but this blow
Might be the be-all and the end-all bere."
11. What Part of Speech is but, in these examples?
"But it is now useless."
"But is a conjunction."
"But one died."
"He can butweep."
"They have but just gone."
"She canpot but mourn."
12. What is the difference between Etymology and Syntax; and to which of these do the preceding questions belong?

## Arithmetic.-Sub-Junior Class. <br> Time--Five hours.

1. Express by figures the following numbers :

One billion, ten thousand, four hundred seventy-two.
Four hundred seventy-six quintillion, eight hundred thirteen million, two hundred forty-six.
One hundred ninsty, and two hundred forty-eight ten millionthe.
2. Express in words the following numbers: $10020000000081000108,31032.002308$.
3. Write the Tables of English Money, Linear Measure, Square Measure, Cubic Measure, Wine Measure, Beer Measure, Avoirdupois Weight, Troy Weight. Give the relative values of the following: 1 lb . Troy and 1 lb . Avoirdupois; 1 gal. Wine and 1 gal. Beer Measure; 1 oz . Troy and 1 oz . Apothecaries' Weight.
4. In 324 lbs . Avoirdupois, how many pounds Troy?
5. Divide 936961 by 231 , using the prime factors of the divisor, and give the true remainder.
6. Reduce 48765248 inches to integers of higher denominations. Reduce 4 tons, 5 lbs .8 oz ., to drachms.
7. Write the rule for finding the Greatest Common Divisor of two numbers.

Find the Greatest Common Divisor of 84 and 210.
8. Find the Least Common Dividend of 1, 2, 3, 4, 5, 6, 7, 8, 9 , and give the rule.
9. Add $\frac{1}{2}$ ton, $\frac{2}{4}$ cwt. $\frac{3}{6} \cdot \mathrm{lb}$., and $\frac{1}{3} \mathrm{oz}$.
10. Multiply 64.827 by .000003000001 .

Divide 40001.2 by . 00008 .
11. Reduce 3 rods, 4 yds., 2 ft ., to the decimal of a mile. Reduce .000812 acres to integers of lower denominations.
12. Solve the following, and give an analysis of each: What is 6 per cent of 11 ? What is $4 \frac{1}{2}$ per cent of $\frac{1}{3}$ ? 2 is what per cent of 72 ?

> Algebra.-Sub-junior Class

Time-Five Hours.

1. Give the signs used in algebra, and explain their uses.
2. Define, and illustrate by an example, each of the following terms : Factor, Coefficient, Exponent, Power, Root, Term, Similar terms.
3. Define, and illustrate by examples, the following : Homogeneous Polynomial, Reciprocal, Numerical Value of an expression, Parenthesis.
4. If $a=1, b=2, c=3$ and $d=4$, what is the numerical value of the expression

$$
\frac{b-a}{c}+\frac{a^{2} c^{2}-b^{2}}{a}-\left(a-b^{4}+c-d\right) \times(a+d)^{2} ?
$$

5. Multiply $4 a^{2}+4 a b-b^{2}$ by $2 a-4 b$.
6. Divide $6 a^{3} b+4 a^{4}-3 b^{4}-3 a^{2} b^{2}-8 a b^{3}$ by $a^{2}+2 a b+b^{2}$.
7. Resolve the following polynomials into factors :

$$
\begin{aligned}
& 4 a^{3} b+8 a^{2} b^{2}+4 a b^{3} \\
& 6 a^{3} c^{2}-12 a^{2} c^{3}+6 a c^{4} . \\
& 6 a b^{2} c d^{4} e-6 a b^{2} c d^{2} \varepsilon^{3}
\end{aligned}
$$

8. $\operatorname{Add} \frac{1}{1+a}, \frac{a}{1-a}$, and $\frac{a}{1+a}$.
9. From $6 a+\frac{14 a-13}{20}$ take $4 a+\frac{2 a-5}{4}$.
10. Multiply $\frac{a+b}{a-b}$ by $a^{2}-2 a b+b^{2}$, giving the result in its simplest form.
11. Divide $\frac{x^{4}-b^{4}}{x^{2}-2 b x+b^{2}}$ by $\frac{x^{2}+b x}{x-b}$, giving the result in its simplest form.
12. Perform the indicated operations in the following expression: $\left[(a-b)^{2}-\{(a-b)(a+b)\}^{2}\right](a+b)^{2}$.
