

ANNUAL REPORT
OF THE
EXECUTIVE COMMITTEE
OF THE
STATE NORMAL SCHOOL.

TRANSMITTED TO THE LEGISLATURE FEBRUARY 10, 1863.

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No. 41.

IN SENATE,

February 10, 1863.

ANNUAL REPORT

OF THE EXECUTIVE COMMITTEE OF THE STATE NORMAL
SCHOOL.

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.

V. M. RICE,

Superintendent of Public Instruction.

JOHN V. L. PRUYN,

Chancellor of the University of the State of New York.

ALBANY, February 6, 1863.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

1957-58

ADMISSIONS

Application for admission to the Ph.D. program in Physics should be sent to the Department of Physics, University of Chicago, Chicago, Illinois.

Applicants should submit a statement of their previous education, a list of references, and a copy of their most recent transcript. They should also submit a copy of their GRE General Test score report. The deadline for applications is January 15th of each year.

For more information, contact the Department of Physics, University of Chicago, Chicago, Illinois. Telephone: (312) 777-3100.

R E P O R T .

To the Superintendent of Public Instruction

and the Regents of the University:

The Executive Committee of the State Normal School

RESPECTFULLY REPORT AS FOLLOWS :

Number of Pupils and Graduates.

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

The graduates of the past year have numbered fifty-four. Of these, twenty-two were males, and thirty-two were females. The whole number of graduates from the beginning is, therefore, one thousand three hundred and thirteen.

During the year, all counties of the State with the exception of four, viz: Fulton, Hamilton, Ontario and Tompkins, have been represented in the school. Thirty counties were represented in the graduating classes.

Number of Pupils and Graduates in Former Years.

The following table presents 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.

		Pupils.	GRADUATES.		Total.
			Males.	Females.	
First year.....	1st term.....	98	0	0	0
	2d ".....	185	29	5	34
Second year.....	3d ".....	197	30	17	47
	4th ".....	205	37	26	63
Third year.....	5th ".....	178	27	19	46
	6th ".....	221	37	25	62
Fourth year.....	7th ".....	198	25	25	50
	8th ".....	208	17	29	46
Fifth year.....	9th ".....	175	22	21	43
	10th ".....	196	19	18	37
Sixth year.....	11th ".....	223	12	20	32
	12th ".....	219	21	13	34
Seventh year.....	13th ".....	232	12	14	26
	14th ".....	236	11	17	28
Eighth year.....	15th ".....	232	13	13	26
	16th ".....	227	19	18	37
Ninth year.....	17th ".....	276	13	26	39
	18th ".....	273	17	25	42
Tenth year.....	19th ".....	253	13	25	38
	20th ".....	265	17	33	50
Eleventh year.....	21st ".....	250	14	27	41
	22d ".....	228	11	26	37
Twelfth year.....	23d ".....	238	10	31	41
	24th ".....	237	12	20	32
Thirteenth year.....	25th ".....	270	13	15	28
	26th ".....	242	10	30	40
Fourteenth year.....	27th ".....	233	9	14	23
	28th ".....	211	11	24	35
Fifteenth year.....	29th ".....	241	14	17	31
	30th ".....	250	7	22	29
Sixteenth year.....	31st ".....	253	14	24	38
	32d ".....	246	18	17	35
Seventeenth year.....	33d ".....	215	14	23	37
	34th ".....	212	13	16	29
Eighteenth year*.....	35th ".....	208	9	15	24
	36th ".....	212	13	17	30
			583	730	1313
			583	730	1313

Present Number and Classification of Pupils.

The thirty-seventh term (the first of the eighteenth year of the State Normal School,) commenced on the third Monday of September; and the number of pupils in attendance is one hundred and ninety-eight. They are divided into four classes: Sub-Juniors, Juniors, Sub-Seniors and Seniors, thus making a course of study extending through two years. These classes are again arranged in divisions to suit the convenience of recitations. The sex and classification of pupils will be seen from the following table:

Class	Males	Females	Total
Seniors	6	25	31
Sub-Seniors	13	43	56
Juniors	12	68	80
Sub-Juniors	5	26	31
Total	36	162	198

The average age of these pupils is twenty years, and their average of time employed in teaching previous to entering the Normal School, is six months.

The number of candidates for admission to the school examined during the past year, is two hundred and twenty-five, and the number admitted is one hundred and ninety.

Sex of Pupils.

It will be observed that the number of young men now in attendance upon the Normal School, is less than at any previous time in its history. It is not difficult to assign a reason for this fact. During the past year, the proportion of male students was unusually large. The war, however, by drawing a large proportion of the young men of the State into the national service, has naturally diminished the resources of the school in that direction. In addition to this, during those disastrous days when the reverses of our armies before Richmond and Washington seemed at once to imperil the capitol and the cause of the nation, the cry to arms, reached the school itself. Actuated by a profound sense of patriotic duty, the Professor and Assistant Professor of Mathematics, who had conducted the school exercises in military drill, organized a full company of Normal School pupils and their friends, and offered their services to the government. They were accepted, and attached to a regiment well known for its honorable

and active service, and have already distinguished themselves for their discipline, fidelity and courage. They are known officially as Co. E. 44th Regiment, N. Y. S. V. The organization of this company, it will be seen, has directly reduced the number of male pupils in the school.

The direct influence of the war has been to diminish the number of young men in a course of preparation for the business of teaching, if it has not still more largely drawn upon the number actually employed as teachers; and that this must be its influence for several years to come, can hardly be doubted. The places thus vacated must be filled, of course to a great extent, by females. This, however, is not a fact to be regretted, for both sound philosophy and common experience prove that educated females more often possess that combination of qualities of mind and heart, which makes the teacher not only a guiding intellect, but a moral power. Indeed it is a question, whether this is not the very revolution needed in our public schools, in order to secure for our youth, so naturally affected with the lawlessness of the age, those refining and chastening influences which can only be exerted by the woman, and without which no education, and no manly character can attain its most beautiful proportions. It is not unreasonable to believe, then, that this diminution of the number of young men preparing to become teachers, is not only creditable to the spirit and principle of the profession, but that it may also be productive of important results to the public schools of the State themselves.

Qualifications of Pupils.

The scholastic preparation required of candidates for admission to the Normal School, remains the same as heretofore; but it is necessary to repeat what has been alluded to in previous reports, that while the present members of the school were in no respect inferior to their predecessors in their preparation to enter upon its course of study, there has been and continues to be in nearly all candidates for admission, a deficiency in the elementary branches, reading, writing, spelling, geography, and composition.

It is to be feared, also, that the importance of other qualifications required in candidates for admission to the Normal School, is not properly realized. Talents above mediocrity, an unsullied and earnest character and sound health, are indispensable; with-

out these, no pupil should be sent to the school; no person not possessed of these, should think of entering upon its course of study.

A teacher to be successful in developing the mental powers of his pupils, must himself possess the highest degree of mental activity; and as the Normal School in its entire system, contemplates exclusively the preparation of a high order of professional teachers, it is evident that it has no proper place for those who lack this first requisite to their professional success—a strong and active mind. So, too, he who would instruct the young, should be himself the possessor of those qualities which make the upright character. It is his first duty to exercise such an influence as shall make the moral growth of the pupil keep pace with his mental culture, and thus enthrone a pure morality as a governing principle over the intelligence which he awakens. Such an influence he *cannot* exert, unless his own character is above reproach. Such an influence he *will not* exert unless his character is as *earnest* as it is unsullied. In this direction, lack of earnestness is immorality. The demand for sound health, always imperative upon the Normal School pupil, is rendered doubly so by the lack of previous preparation above mentioned. That want entails upon him the double duty of laboring to correct the errors and deficiencies of his academic training, in addition to the work of mastering the best methods of teaching, and attaining a practical skill in their application. Either of these would sufficiently tax the talents and endurance of the thoroughly earnest pupil. The unavoidable combination of these in the Normal School course, gives emphasis to the demand for superior mental abilities, and makes sound health indispensable. Without the latter, the pupil must fail, as a pupil. It is believed, also, that severe as is the demand thus made upon the intellectual and physical powers of the student in the Normal School course, it is no greater than will be required in the discharge of the duties upon which he is ultimately expected to enter, if he gives himself heartily and wholly to their performance. Unless, then, the pupil possesses the health and mental power necessary to the successful completion of his course of professional training, it becomes not only a question whether he should claim the facilities afforded by the Normal School, but whether he should even attempt the responsibilities of the teacher's calling. A deficiency which seriously raises questions like these, might not unreasonably be con-

sidered, of itself, a sufficient bar against the admission of the student to the Normal School.

Faculty.

Several changes have occurred in the Faculty since the date of the last report. At the close of the 35th term, Rodney G. Kimball, A. M., professor of Mathematics and Mr. Albert N. Husted, assistant teacher of Mathematics, resigned their respective positions to enter the army. In noticing the resignation of these teachers the committee desire to give testimony to the faithfulness and marked ability with which they discharged their duties during seven years in the Normal School, and to express their confidence in the belief, that the same ability and faithfulness will make them eminently useful and distinguished in their new positions.

The vacant professorship has been filled by the provisional appointment of Mr. Charles D. Lawrence, a graduate of the third term of the school and a well known and successful teacher of Mathematics. Miss Mary E. Howell, a graduate of the twenty-sixth term, and Mr. Josiah S. Marean, a graduate of the thirty-fifth term, have been employed as assistants.

The following is a full list of the present officers of the school:

DAVID H. COCHRAN, A. M. Ph. D.,

Principal, and Professor of Moral and Mental Philosophy.

FREDERICK S. JEWELL, A. M.,

Professor of the English Language and Literature.

LE ROY C. COOLEY, A. M.,

Professor of Natural Science.

CHARLES D. LAWRENCE,

Professor of Mathematics.

WILLIAMS D. HUNTLY, A. M.,

Superintendent of the Experimental School.

RALPH S. GOODWIN,

Teacher of Elocution and Penmanship.

JOSIAH T. MAREAN,

Teacher of Algebra and Mental Arithmetic.

JAMES M. NORTH,

Teacher of Vocal Music.

LOUISA OSTROM,

Teacher of History and Drawing.

MARY E. BUTLER,

Teacher of Geography and Reading.

MARY E. HOWELL,
Teacher of Arithmetic and Grammar.
LYDIA K. KEYES,
Teacher of the Primary School.

Libraries and Apparatus.

The text book and miscellaneous libraries are substantially the same as at the date of the last report, no additions having been made except to supply the place of books too much worn for longer use.

All the apparatus belonging to the school has been carefully examined, and found to be in good condition.

Experimental School.

No change has been made in the arrangements of this school since the last report. It furnishes the members of the graduating class an opportunity for applying, under the direction of an experienced teacher, the methods of instruction imparted in the Normal School, and in its organization, instruction and discipline furnishes a model after which they may form the schools they may be called to teach. It has acquired a high reputation as a school of elementary instruction, and the applications for admission exceed the number that can be accommodated. A tuition fee of \$12.50 per term for each pupil, renders this school self-sustaining. At present it numbers 105 pupils. A full account of its organization is found in the document accompanying this report.

Primary School.

A model primary school has been organized, as proposed in the last report, for the purpose of acquainting the graduates of the Normal School with the practical details of primary teaching according to the most approved methods. This department, numbering forty pupils between the ages of five and seven, is under the supervision of Miss Lydia K. Keyes, a graduate of the twentieth term, who is admirably fitted in every respect for her position.

All of the female pupils, during the sub-senior term, spend at least one week in this department, and during six weeks of the senior term are occupied one hour each day, in the discussion of methods of instruction adapted to primary schools, and the principles upon which they are based.

A tuition fee of twenty dollars a year, paid by each pupil, renders the school self-sustaining; and thus a means of illustra-

tion, long needed, is supplied to the students of the Normal School without additional expense to the State.

Although this school has been in progress but a short time, and is so great an innovation in its methods, it has proved eminently successful. The applications for admission are nearly double the capacity of the school to accommodate. Much of its popularity is no doubt due to the ability of the teacher in charge; but much must also be regarded as public testimony in favor of the system.

The Pestalozzian system is undoubtedly liable to great abuse, and the most absurd claims have been put forth by its advocates; but, in the hands of such teachers as the Normal School is designed to furnish, it must be admitted to be a great advance upon the old methods of primary teaching. Substituting as it does, in a great degree, oral instruction in the place of the text book, the teacher must be not only trained in its method, but must possess, also, thorough and accurate scholarship, or its introduction into our schools will result in a sad failure. Oral instruction beyond what pertains to the very first steps in education, if given by those trained alone in the methods and unacquainted with the relations and mutual dependencies of the different sciences, must be defective, confused and erroneous. Therefore the Normal School will attempt to instruct in Pestalozzian methods only those pupils who have nearly completed its course of study, and have evinced superior scholarship.

The favor with which all attempts to improve the character of primary schools are regarded, is most encouraging, and marks the dawn of a new era in education. It is now conceded that the best ability and the most thorough education are demanded in the instruction of children at the period when their progress in learning is most difficult, before the attention is brought under the control of the will and the power of continuous thought developed. If at this period the mind of a child is crippled or misdirected in its development, if its sensitive nature is benumbed, or its lively curiosity repressed, no teacher's hand in after years can repair the injury. The public are learning that cheap primary teachers are expensive and dangerous servants; and consequently the boards of education in many of our cities have taken the first proper steps to secure a better class, by raising the wages of such teachers to an equality with that of teachers in the higher departments. For these positions, a class

of teachers having special qualifications is demanded ; and it is believed that the discipline of the Normal School course, together with the advantages of the primary and experimental departments peculiarly adapt it to supply the demand.

A statement of all receipts and expenditures from September, 1861, to September, 1862, 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.

ALBANY, *February 6, 1863.*

FINANCIAL REPORT.

New York State Normal School in account with Executive Committee.

1861.	Cr.	
Balance of last year		\$691 75
1862.		
Cash from Comptroller		12,000 00
Cash received for tuition in experimental and primary schools		2,803 04
Interest on deposits		63 53
		<hr/>
		\$15,558 32
		<hr/> <hr/>

1861.	Dr.	
To cash paid salaries		\$8,980 00
1862.		
To cash paid stationery and text books		367 36
do mileage to students		1,036 75
do repairs to building		617 55
do fuel		445 91
do insurance		70 00
do contingents		1,541 38
do support of experimental and primary schools		1,557 53
Balance in bank		941 84
		<hr/>
		\$15,558 32
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DOCUMENTS

ACCOMPANYING THE ANNUAL REPORT OF THE EXECUTIVE COMMITTEE.

- A, Annual Register and Circular of the State Normal School for the year ending July 10, 1862, 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 traveling 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 beginning of the year.
- C, Examination papers for written examinations at close of 35th term.

(A.)

Annual Register and Circular of the State Normal School,
Albany, N. Y., for the year ending July 10, 1862.

Executive Committee.

Hon. V. M. RICE,

Superintendent of Public Instruction,

CHAIRMAN.

CHARLES L. AUSTIN, Esq.,

Hon. FRANKLIN TOWNSEND,

SAMUEL B. WOOLWORTH, *Secretary and Treasurer.*

Faculty.

DAVID H. COCHRAN, A. M., Ph. D.,

Principal, and Professor of Moral and Intellectual Philosophy.

RODNEY G. KIMBALL, A. M.,

Professor of Mathematics.

LE ROY C. COOLEY, 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.

RALPH S. GOODWIN,

Teacher of Elocution and Penmanship.

JAMES M. NORTH,

Teacher of Vocal Music.

LOUISA OSTROM,

Teacher of History and Drawing.

MARY E. BUTLER,

Teacher of Geography and Drawing.

LYDIA K. KEYES,

Teacher of Primary School.

STUDENTS.

FEMALES.

Names.	Towns.	Counties.
Anna Agnew	Ogdensburgh	St. Lawrence.
Elmira B. Armour	Watervliet	Albany.
Hannah T. Austin	Syracuse	Onondaga.
Amanda M. Baker	Corning	Steuben.
Mary E. Ballard	Watertown	Jefferson.
Helen J. Bartley	Albany	Albany.
Caroline A. Barrett	Collins	Erie.
Rachel Bedford	Thompson	Sullivan.
Emily Best	Copake	Columbia.
Marie E. Biddlecome	Watertown	Jefferson.
Catherine B. Blessing	Albany	Albany.
Helen K. Blessing	Albany	Albany.
Florence E. Blodget	Yorkshire	Cattaraugus.
Anna Boice	Olive	Ulster.
Laurentine S. Bonney	Pamelia	Jefferson.
Abi Bowhall	Watertown	Jefferson.
Mary Jane Bowhall	Watertown	Jefferson.
Mary Boyd	Albany	Albany.
Gertrude Brayton	Geneseo	Livingston.
Mary A. Breese	Horseheads	Chemung.
Frances L. Briggs	Coeymans	Albany.
Phebe Brown	Corinth	Saratoga.
Sarah Burrage	Hyde Park	Dutchess.
Carrie F. Burrows	Pomfret	Chautauqua.
Lona E. Burton	Rodman	Jefferson.
Adrianna D. Butler	Williamsburgh	Kings.
M. Louisa Campbell	Troy	Rensselaer.
Amanda H. Carr	Albany	Albany.
Mary C. Clark	Ogden	Monroe.
Emeline Cobb	Greenville	Greene.
Clara S. Cochran	Concord	Erie.
Anna E. Cocks	Oyster Bay	Queens.

Names.	Towns.	Counties.
Mary F. Cocks	Oyster Bay	Queens.
Phebe Cocks	Cornwall	Orange.
Sarah E. Cock	Oyster Bay	Queens.
Kate J. Chamberlayne	Yates	Orleans.
Anna A. Conde	Yates	Orleans.
Hattie Coryell	Dix	Schuyler.
Margaret Courtney	Albany	Albany.
Euretta Crannell	New York	New York.
Clara L. Crofoot	Hannibal	Oswego.
Kate C. Crow	New York	New York.
Elizabeth B. Day	New York	New York.
Jennette E. Dayton	Williamstown	Oswego.
Sarah J. Dearstye	Greenbush	Rensselaer.
Fannie M. Dennington	Galen	Wayne.
Margaret Deyo	Greenbush	Rensselaer.
Harriet L. Dickinson	Alexander	Genesee.
Dorinda Dickson	South East	Putnam.
Minerva Dickson	Harmony	Chautauqua.
Mary J. Don	Albany	Albany.
Anna M. Duff	New York	New York.
Georgia J. Dunbar	Hamilton	Madison.
Helene S. Duryee	Schenectady	Schenectady.
Annette L. Dye	Hanover	Chautauqua.
Eliza J. Fitch	New Scotland	Albany.
Susanna Frazer	Haverstraw	Rockland.
Sarah J. Gedney	Rye	Westchester.
Europa D. Gifford	Easton	Washington.
Frances A. Gilborne	Ballston	Saratoga.
Jane M. Gillman	Albany	Albany.
Lydia J. Gladding	Waterville	Oneida.
Mary F. Glen	Albany	Albany.
Amelia Gomp	Albany	Schoharie.
Martha Goring	Fishkill	Dutchess.
Jennie M. Gourlie	Putnam	Washington.
L. Georgia Grandin	Jamestown	Chautauqua.
Emma H. Gray	Armonk	Westchester.
Permelia Greene	New Baltimore	Greene.
Sarah C. Griffith	Tyrone	Schuyler.
Arrietta L. Griffin	Albany	Albany.
Ella P. Griswold	Little Falls	Herkimer.

Names.	Towns.	Counties.
Phebe Gustin	Conesville	Schoharie.
Carrie V. Haff	Brooklyn	Kings.
Emma A. Haff	Brooklyn	Kings.
Sabina M. Haff	Brooklyn	Kings.
Maria E. Hawley	Albany	Albany.
Caroline V. Hawthorne	Schroepel	Oswego.
Martha A. Hay	Broome	Schoharie.
Madaline A. Hayden	Syracuse	Onondaga.
Anna Healy	New York	New York.
Kate J. Heath	Catskill	Greene.
Margaret Hevenor	Rhinebeck	Dutchess.
Harriet L. Hill	Corning	Steuben.
Kate M. Hiller	N. Hempstead	Queens.
Catharine E. Hogan	Albany	Albany.
Catharine Holiday	Auburn	Cayuga.
Mary W. Holley	Ellisburgh	Jefferson.
Mary A. Horton	Newburgh	Orange.
Josephine Howard	Brooklyn	Kings.
Martha M. Hubbard	Caton	Steuben.
Lydia Hunt	New Baltimore	Greene.
Maggie Hyde	Poughkeepsie	Dutchess.
Hannah E. Isdell	Albany	Albany.
Jane Jaywith	Albion	Oswego.
Mary A. Jones	Utica	Oneida.
Sarah W. Keeler	Candor	Tioga.
Minnie E. Killip	Albany	Albany.
Ella A. Kinney	Wynant's Kill	Rensselaer.
J. Clara Lane	Westmoreland	Oneida.
Melissa Landt	Danube	Herkimer.
Catharine Lapp	Clarence	Erie.
Emma E. Lodge	Albany	Albany.
Sophia M. Loomis	Rodman	Jefferson.
Kate Lynch	Albany	Albany.
Sarah A. Lyon	Stamford	Dutchess.
Carrie Martin	Albany	Albany.
Marion A. Matoon	Albany	Albany.
Kate McAuley	Albany	Albany.
Jennie L. McBurney	Albany	Albany.
Anna R. McCutchan	Cayuta	Schuyler.
Margaret McDermott	Watertown	Jefferson.

Names.	Towns.	Counties.
Charlotte McWayne	Henderson	Jefferson.
Anna C. Merriman	Butler	Wayne.
Marthaette Moak	Carlisle	Schoharie.
Harriet B. Moffatt	Blooming Grove.	Orange.
Rebecca A. Moran	Kinderhook	Columbia.
Margaret N. Murphy	New York	New York.
Mary L. Noble	Red Hook	Dutchess.
Susan C. O'Neal	Yorkshire	Cattaraugus.
Phebe E. Opdyke	Waterloo	Seneca.
Catharine V. Orchard	New Hamburg.	Dutchess.
W. Maria Pearse	Albany	Albany.
Harriet O. Peeke	Schenectady	Schenectady.
Angie E. Pepper	Little Falls	Herkimer.
Mary E. Perry	Utica	Oneida.
Catharine Pierce	Homer	Cortland.
Julia L. Plumb	New Hartford	Oneida.
Maggie B. Porter	Cambria	Niagara.
Emma J. Price	Amenia	Dutchess.
Salome Purroy	West Farms	Westchester.
Mary E. Rathbun	Easton	Washington.
Helena M. Reilay	Albany	Albany.
Mary A. Richards	Albany	Albany.
Mary L. Riley	Cobleskill	Schoharie.
Julia A. Robinson	Sing Sing	Westchester.
Sarah E. Salisbury	Albany	Albany.
Anna E. Seager	New York	New York.
Sarah M. Sexton	Greece	Monroe.
Amelia Sharpe	Schoharie	Schoharie.
Mary E. Shepherd	Stillwater	Saratoga.
Mary L. Sherman	Galen	Wayne.
Helen J. Sherwood	Niagara	Niagara.
Martha A. Shipman	Warsaw	Wyoming.
Matilda C. Shultes	Berne	Rensselaer.
Caroline A. Sill	Albany	Albany.
Caroline Smith	Orleans	Jefferson.
Lizzie Smith	Albany	Albany.
Kate A. Stebbins	Little Falls	Herkimer.
Anna M. Stevens	Auburn	Cayuga.
Lucy C. Stevens	New York	New York.
Mary C. Stewart	Middletown	Orange.
Kate H. St. John	Berne	Albany.

Names.	Towns.	Counties.
Lucy A. Stryker	Java	Wyoming.
Martha J. Stuart	Dayton	Cattaraugus.
Fannie M. Taber	Scipio	Cayuga.
Helen M. Taylor	Cairo	Greene.
H. Maria Thompson	Denmark	Lewis.
Mary S. Thompson	Ballston	Saratoga.
Harriet S. Todd	Manlius	Onondaga.
Addie Tooker	Greenbush	Rensselaer.
Sarah J. Tooker	Brookhaven	Suffolk.
Martha E. Townsend	Carroll	Chautauqua.
Mary Townsend	Carroll	Chautauqua.
Emily Tuttle	Albany	Albany.
Sybil Underwood	Chautauqua	Chautauqua.
Hannah C. Vail	Somers	Westchester.
Mary E. Vail	Sing Sing	Westchester.
Kate L. Valentine	Oyster Bay	Queens.
Lavina A. Van Schaack	New Scotland	Albany.
Emily Voorhess	Andes	Delaware.
Helen Voorhess	Rockland	Sullivan.
Carrie Wadams	Scipio	Cayuga.
Louisa A. Walker	Troy	Rensselaer.
Mary E. Wall	Manlius	Onondaga.
Helen E. Webster	Warsaw	Wyoming.
Martha Weed	New York	New York.
Emma R. Weidman	Dansville	Livingston.
Mary E. Weidman	Dansville	Livingston.
Julia E. Wemple	New York	New York.
Celynda Werner	Cobleskill	Schoharie.
Ada Weston	North Buffalo	Erie.
M. Estelle Whitaker	Barton	Tioga.
Ermina E. White	Corinth	Saratoga.
Sarah L. White	Albany	Albany.
Sarah E. Wickes	Lowville	Lewis.
Helen E. Wilbur	Albany	Albany.
Lettie A. Wildman	Wellsville	Allegany.
Malinda Wilsie	Broome	Schoharie.
Helen L. Winchester	Kingston	Ulster.
Isabel H. Wiswell	N. Norwich	Chenango.
Julia A. Wolcott	Milan	Yates.
M. Amelia Wood	Conquest	Cayuga.
Emma Wygant	Kingston	Ulster.

MALES.

Names.	Towns.	Counties.
Madison Babcock	Lowville	Lewis.
Ezra H. Ballard	Fort Covington	Franklin.
Andrew J. Baltz	Orleans	Jefferson.
Alonzo L. Bardin	Queensbury	Warren.
James Barkley	Catskill	Greene.
John W. Bartrum	Unionvale	Dutchess.
James E. Beardsley	Lewis	Essex.
Oscar J. Blakeley	Elma	Erie.
Henry Borst	Carlisle	Schoharie.
Robert L. Brougham	Root	Montgomery.
Orville Broughton	Fort Ann	Washington.
Theodore F. Brown	Ridgeway	Orleans.
George W. Burhans	Le Grange	Seneca.
Sidney W. Burroughs	Varick	Seneca.
Horatio G. Cass	Decatur	Otsego.
George W. Cheeney	Fort Covington	Franklin.
George H. Cipperly	East Greenbush	Rensselaer.
Addison L. Clark	Denmark	Lewis.
Henry Clement	Covington	Wyoming.
Franklin Cogswell	Pine Valley	Chemung.
Josiah S. Colt	Lewiston	Niagara.
Seaman A. Colwell	Unionvale	Dutchess.
Andrew Comstock	Greenfield	Saratoga.
John D. Conley	Lenox	Madison.
George W. Cook	Horseheads	Chemung.
Hobart Cook	Moers	Clinton.
Irving Coonley	Cicero	Onondaga.
George W. Crane	Vestal	Broome.
Robert B. Darling	Watervliet	Albany.
George H. Dickson	Webster	Monroe.
Austin B. Duncan	Unionvale	Dutchess.
Frederick Eastman	Wheatland	Monroe.
Charles Ferris	North Castle	Westchester.
David F. Ferris	Cortlandt	Westchester.
Joseph B. Fryer	Easton	Washington.
Franklin E. Gates	Lenox	Madison.
George A. Germond	Schoharie	Schoharie.
Minor Gibbons	Scipio	Cayuga.
Alanson H. Green	Berlin	Rensselaer.

Names.	Towns.	Counties.
George W. Green	Walkill	Orange.
Wallace B. Hard	Murray	Orleans.
Edwin A. Hartshorn	Petersburgh	Rensselaer.
Henry B. Higgins	Leicester	Livingston.
Charles F. Hill	Albany	Albany.
Andress B. Hull	Lewisboro	Westchester.
Francis D. Hunt	Smyrna	Chenango.
Edwin Husted	Pleasant Valley	Dutchess.
William H. Johnstone	Whitestone	Queens.
Champion H. Judson	Livingstonville	Schoharie.
Edward Kimmey	Schodack	Rensselaer.
Isaac Landt	Danube	Herkimer.
Edward F. Lawrence	Smyrna	Chenango.
Ralph Le Fevre	New Paltz	Ulster.
William E. Lewis	Kirkwood	Broome.
Charles W. Loomis	Binghamton	Broome.
Schuyler Lott	Lodi	Seneca.
Josiah T. Marean	Maine	Broome.
James Marsh	Roseboom	Otsego.
Nicholas Maybee	Oyster Bay	Queens.
Leander McCrosson	Greenport	Columbia.
Cyrus T. McDuffee	Varick	Seneca.
Hugh McGuckin	Summerhill	Cayuga.
Anson H. Merrick	Fort Covington	Franklin.
John S. Miller	Schodack	Rensselaer.
Wesley Miller	Schodack	Rensselaer.
Orrin G. Moore	Southold	Suffolk.
Frederick A. Morrison	Rutland	Jefferson.
Hiram F. Olmstead	Onondaga	Onondaga.
Henry S. Parks	Whitehall	Washington.
Joshua W. Powell	Oyster Bay	Queens.
Eugene W. Read	Wales	Erie.
Alonzo Reed	Roxbury	Delaware.
Charles L. Rickerson	Cairo	Greene.
Hamilton Rightmyer	Richmondville	Schoharie.
W. De Lawn Robbins	Denmark	Lewis.
William Roberts	Varick	Seneca.
John C. Sharp	Scott	Cortland.
John Skinner	Niagara	Niagara.
Lyman Smith	Orleans	Jefferson.

Names.	Towns.	Counties.
George G. Stebbins	Little Falls	Herkimer.
Myron D. Stewart	Stockbridge	Madison.
Gerard C. Strang	Carmel	Putnam.
Vermont Sutton	Stafford	Seneca.
H. Josiah Swift	Cuba	Allegany.
Charles W. Taylor	Carlisle	Schoharie.
Lewis D. Taylor	Madrid	St. Lawrence.
George H. Thomer	Rotterdam	Schenectady.
Charles E. Thorn	Horseheads	Chemung.
Elbert Traver	Rhinebeck	Dutchess.
Gould J. Travis	Kent	Putnam.
John H. Tucker	Davenport	Delaware.
Warren E. Valentine	Jackson	Washington.
James Vernon	Richmond	Richmond.
Nathan M. Ward	New Scotland	Albany.
George Watts	Mamaroneck	Westchester.
Marcus A. Weed	Richland	Oswego.
Consider H. Willett	Onondaga	Onondaga.
John V. Winnie	Kingston	Ulster.
George B. Wolcott	Milan	Yates.
Alexander Young	Cicero	Onondaga.
Females		199
Males		98
Total		<u>297</u>

GRADUATES

Of the Thirty-fifth Term, ending January, 30, 1862.

FEMALES.

Names.	Post offices.	Counties.
Phebe Brown	Corinth	Saratoga.
Mary C. Clark	North Chili	Monroe.
Euretta Crannel	Albany	Albany.
Jennette E. Dayton	Kasoag	Oswego.
Minerva Dickson	Stedman	Chautauqua.
Helene L. Duryee	Schenectady	Schenectady.
Annette L. Dye	Forestville	Chautauqua.
Eliza J. Fitch	New Salem	Albany.
Kate J. Heath	Catskill	Greene.
Sarah M. Sexton	Hanford Land'g	Monroe.
Maria H. Thompson	Copenhagen	Lewis.
Sarah J. Tooker	Port Jefferson	Suffolk.
Emily Tuttle	Albany	Albany.
Sybil Underwood	Mayville	Chautauqua.
Helen E. Webster	Warsaw	Wyoming.

MALES.

Names.	Post offices.	Counties.
Franklin Cogswell	Catlin	Chemung.
George N. Green	Middletown	Orange.
Wallace B. Hard	Holley	Orleans.
Edward Kimmey	East Greenb'sh	Rensselaer.
William E. Lewis	Kirkwood	Broome.
Orrin G. Moore	Cutchogue	Suffolk.
Hiram F. Olmsted	On'daga Valley	Onondaga.
Alonzo Reed	Roxbury	Delaware.
John Skinner	Suspens'n B'dge	Niagara.

Females	15
Males	9
Total	24

GRADUATES

Of the Thirty-sixth Term, ending July 10, 1862.

FEMALES.

Names.	Post offices.	Counties.
Caroline A. Bassett.....	Gowanda.....	Cattaraugus.
Laurentine L. Bonney.....	Brownville.....	Jefferson.
Gertrude Brayton.....	Geneseo.....	Livingston:
Mary F. Cock.....	Glen Cove.....	Queens.
Anna A. Conde.....	Yates.....	Orleans.
Amelia Gomph.....	Albany.....	Albany.
Kate M. Hiller.....	Roslyn.....	Queens.
Martha M. Hubbard.....	Caton.....	Steuben.
Emma E. Lodge.....	Albany.....	Albany.
Marion A. Mattoon.....	Albany.....	Albany.
Jenny L. McBurney.....	Albany.....	Albany.
Phebe E. Opdyke.....	Waterloo.....	Seneca.
Emma J. Price.....	Amenia Union.....	Dutchess.
Kate A. Stebbins.....	Little Falls.....	Herkimer.
Mary E. Weidman.....	Dansville.....	Livingston.
M. Estelle Whitaker.....	Factoryville.....	Tioga.
Charlotte M. McWayne.....	Sacketts Harb'r.....	Jefferson.

MALES.

Names.	Post offices.	Counties.
Madison Babcock.....	W. Martinsb'gh.....	Lewis.
James Barkley.....	Catskill.....	Greene.
James O. Blakeley.....	Spring Brook.....	Erie.
Horatio G. Cass.....	Decatur.....	Otsego.
Seaman A. Colwell.....	Verbank.....	Dutchess.
Robert B. Darling.....	Newtonville.....	Albany.
Alanson H. Green.....	South Berlin.....	Rensselaer.
Henry B. Higgins.....	Moscow.....	Livingston.
Andress B. Hull.....	South Salem.....	Westchester.
Josiah T. Marean.....	Maine.....	Broome.
Francis A. Morrison.....	South Rutland.....	Jefferson.
Elbert Traver.....	Rhinebeck.....	Dutchess.
Consider H. Willett.....	Navarino.....	Onondaga.

Females.....	17
Males.....	13
Total.....	30

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 18th 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 31st 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 furnished 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 _____ 18____ 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 so much 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 attainments, 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 making 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, unblemished 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 insure 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 traveling 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 traveling expenses.

Counties.	Amount paid to each pupil.	Counties.	Amount paid to each pupil.
Albany	\$0 00	Oneida	\$2 00
Allegany	9 31	Onondaga	2 96
Broome	5 21	Ontario	4 50
Cattaraugus	9 00	Orange	2 65
Cayuga	3 74	Orleans'	5 50
Chautauqua	8 30	Oswego	4 00
Chemung	6 98	Otsego	3 00
Chenango	3 70	Putnam	2 00
Clinton	5 50	Queens	3 75
Columbia	0 75	Rensselaer	0 18
Cortland	4 06	Richmond	3 50
Delaware	7 10	Rockland	3 00
Dutchess	1 50	Saratoga	0 90
Erie	6 00	Schenectady	0 45
Essex	5 60	Schoharie	1 50
Franklin	6 60	Schuyler	7 50
Fulton	1 52	Seneca	4 90
Genesee	5 50	St. Lawrence	6 00
Greene	1 02	Steuben	8 00
Hamilton	4 00	Suffolk	5 25
Herkimer	1 70	Sullivan	4 56
Jefferson	4 80	Tioga	6 50
Kings	3 50	Tompkins	5 10
Lewis	4 80	Ulster	2 00
Livingston	5 60	Warren	1 86
Madison	3 00	Washington	1 50
Monroe	4 60	Wayne	3 86
Montgomery	0 88	Westchester	3 00
New York	3 25	Wyoming	7 00
Niagara	5 75	Yates	6 36

Apparatus.

The apparatus of the school is well assorted, and sufficiently extensive to illustrate all the important principles in natural philosophy, surveying, chemistry, and human physiology. Extraordinary 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.

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 \$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.

	Text Books.
Reading	<i>Mandeville.</i>
Spelling.	
Elementary Sounds of the Letters	<i>Page's Normal Chart.</i>
Writing.	
English Prose Composition	<i>Quackenboss.</i>
Geography and Outline Maps	<i>McNally.</i>
Intellectual Arithmetic	<i>Davies.</i>
Elementary Arithmetic	<i>Davies.</i>
English Grammar	<i>Clark.</i>
History	<i>Wilson.</i>
Chronology, Bem's system	<i>Miss Peabody.</i>
Elementary Algebra, begun	<i>Davies.</i>

JUNIORS.

Intellectual Arithmetic	<i>Davies.</i>
Practical Arithmetic	<i>Davies.</i>
Geography and Map Drawing	<i>McNally.</i>
Writing.	
Elementary Sounds of the Letters	<i>Page's Normal Chart.</i>
Reading	<i>Mandeville.</i>
History	<i>Wilson.</i>
English Grammar	<i>Clark and Brown.</i>
Elementary Algebra	<i>Davies.</i>

SUB-SENIORS.

Book-Keeping	<i>Palmer.</i>
Higher Arithmetic	<i>Davies' University.</i>
Geometry, six books	<i>Davies' Legendre.</i>
Rhetoric	<i>Day.</i>
Drawing.	
Elementary Algebra, reviewed	<i>Davies.</i>
Natural Philosophy	<i>Gray.</i>
Perspective Drawing	<i>Lectures.</i>
Mathematical Geography and use of globes	<i>Lectures.</i>

Constitutional Law, with select parts of the R. Statutes most intimately connected with the rights and duties of citizens... } *Young's Science of Government; Revised Statutes.*

SENIORS.

Grammatical Analysis	<i>Clark.</i>
Higher Algebra	<i>Davies' Bourdon.</i>
Plane Trigonometry, as contained in	<i>Davies' Legendre.</i>
Surveying and Mensuration	<i>Davies.</i>
Physiology	<i>Hooker.</i>
Astronomy	<i>Brocklesby.</i>
Intellectual Philosophy	<i>Champlin.</i>
Moral Philosophy	<i>Wayland.</i>
Chemistry	<i>Silliman.</i>
Agricultural Chemistry	<i>Norton.</i>
Geology	<i>Wells.</i>
Art of Teaching	} <i>Lectures, Page, Russel, and attendance in the Experimental and Primary Schools.</i>

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 insufficient 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 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 department, 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. 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 in this department embraces the subjects usually taught in our public schools.

To give each member of the Senior class 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 pupils each, corresponding to the number of 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 he is to study carefully, and apply in practice. The Superintendent meets these teachers every morning (half an hour) before school,

to remove any difficulties they may have found in the discharge of their duties, and to criticise fully and freely 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 teacher is employed in the Experimental Department is from two to three weeks, depending upon the number of the Senior class.

Primary School.

The object of this school is to illustrate the organization, management and instruction of primary schools. It is composed of pupils between the ages of five and seven years, who are taught for the most part, orally by means of sensible objects, in accordance with Pestalozzian principles. The female pupils spend at least one week of the Sub-Senior term in this department, and they are engaged for six weeks of the Senior term, one hour each day in the discussion and practice of methods of primary teaching.

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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 State 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 certificate, we the Executive Committee have granted this DIPLOMA.

[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 FALL TERM—SIX WEEKS.

9 A. M. to 9.20.....	Opening Exercises.		
	Seniors.....	Geology.....	Prof. Cooley.
	Sub-Seniors, No. 1...	Geometry.....	Prof. Lawrence.
	Sub-Seniors, No. 2...	Grammar.....	Prof. Jewell.
9.20 to 10.05.....	Juniors, No. 1.....	Reading.....	Mr. Goodwin.
	Juniors, No. 2.....	Reading.....	Miss Butler.
	Sub-Juniors, No. 1...	History.....	Miss Ostrom.
	Sub-Juniors, No. 2...	History.....	Miss Howell.
10.05 to 10.15.....	Rest and Change of Classes.		
	Seniors.....	Theory and Practice.....	Principal.
	Sub-Seniors, No. 1...	Natural Philosophy.....	Prof. Cooley.
	Sub-Seniors, No. 2...	Algebra.....	Prof. Lawrence.
10.15 to 11.....	Juniors, No. 1.....	Algebra.....	Mr. Goodwin.
	Juniors, No. 2.....	Arithmetic.....	Miss Howell.
	Sub-Juniors, No. 1...	Composition.....	Miss Ostrom.
	Sub-Juniors, No. 2...	Composition.....	Miss Butler.
11 to 11 10.....	Rest and Change of Classes.		
	Seniors.....	Logic of Mathematics....	Prof. Lawrence.
	Sub-Seniors, No. 1...	Science of Government....	Mr. Goodwin.
	Sub-Seniors, No. 2...	Natural Philosophy.....	Prof. Cooley.
11.10 to 11.55.....	Juniors, No. 1.....	Geography.....	Prof. Jewell.
	Juniors, No. 2.....	Intellectual Arithmetic..	Miss Butler.
	Sub-Juniors, No. 1...	Arithmetic.....	Miss Ostrom.
	Sub-Juniors, No. 2...	Arithmetic.....	Miss Howell.
11.55 to 12.15.....	Recess.		
	Seniors.....	Intellectual Philosophy..	Principal.
	Sub-Seniors, No. 1...	Drawing.....	Miss Ostrom.
	Sub-Seniors, No. 2...	Geometry.....	Prof. Lawrence.
12.15 to 1.....	Juniors, No. 1.....	Grammar.....	Prof. Jewell.
	Juniors, No. 2.....	Algebra.....	Mr. Goodwin.
	Sub-Juniors, No. 1...	Grammar.....	Miss Butler.
	Sub-Juniors, No. 2...	Grammar.....	Miss Howell.
1 to 1.10.....	Rest and Change of Classes.		
	Seniors.....	Chemistry.....	Prof. Cooley.
	Sub-Seniors, No. 1...	Arithmetic.....	Prof. Lawrence.
	Sub-Seniors, No. 2...	Drawing.....	Miss Ostrom.
1.10 to 1.55.....	Juniors, No. 1.....	Arithmetic.....	Mr. Goodwin.
	Juniors, No. 2.....	Grammar.....	Prof. Jewell.
	Sub-Juniors, No. 1...	Geography.....	Miss Butler.
	Sub-Juniors, No. 2...	Geography.....	Miss Howell.
1.55 to 2.....	Dismission.		

PROGRAMME :

FOR THE SECOND THIRD OF FALL TERM—SIX WEEKS.

9 A. M. to 9.20.....	Opening Exercises.	
	Seniors	Geology and Physiology. Prof. Cooley.
	Sub-Seniors, No. 1....	Grammar..... Prof. Jewell.
	Sub-Seniors, No. 2....	Algebra..... Prof. Lawrence.
9.20 to 10.05...	Juniors, No. 1.....	Arithmetic..... Mr. Goodwin.
	Juniors, No. 2.....	History..... Miss Ostrom.
	Sub-Juniors, No. 1....	Intellectual Arithmetic. Miss Butler.
	Sub-Juniors, No. 2....	Intellectual Arithmetic.. Miss Howell.
10.05 to 10.15.....	Rest and Change of Classes.	
	Seniors	Moral Philosophy..... Principal.
	Sub-Seniors, No. 1....	Geometry..... Prof. Lawrence.
	Sub-Seniors, No. 2....	Natural Philosophy..... Prof. Cooley.
10.15 to 11.....	Juniors, No. 1.....	History..... Miss Ostrom.
	Juniors, No. 2.....	Algebra..... Mr. Goodwin.
	Sub-Juniors, No. 1....	Geography..... Miss Butler.
	Sub-Juniors, No. 2....	Geography..... Miss Howell.
11 to 11.10.....	Rest and Change of Classes.	
	Seniors	Higher Mathematics.... Prof. Lawrence.
	Sub-Seniors, No. 1....	Natural Philosophy..... Prof. Cooley.
	Sub-Seniors, No. 2....	Drawing..... Miss Ostrom.
11.10 to 11.55...	Juniors, No. 1.....	Grammar..... Prof. Jewell.
	Juniors, No. 2.....	Reading..... Miss Butler.
	Sub-Juniors, No. 1....	Arithmetic..... Mr. Goodwin.
	Sub-Juniors, No. 2....	Arithmetic..... Miss Howell.
11.55 to 12.15.....	Recess.	
	Seniors	Intellectual Philosophy.. Principal.
	Sub-Seniors, No. 1....	Drawing..... Miss Ostrom.
	Sub-Seniors, No. 2....	Geometry..... Prof. Lawrence.
12.15 to 1.....	Juniors, No. 1.....	Reading..... Mr. Goodwin.
	Juniors, No. 2.....	Grammar..... Prof. Jewell.
	Sub-Juniors, No. 1....	Grammar..... Miss Ostrom.
	Sub-Juniors, No. 2....	Grammar..... Miss Howell.
1 to 1.10.....	Calisthenics and Sub-Lectures.	
	Seniors	Chemistry..... Prof. Cooley.
	Sub-Seniors, No. 1....	Algebra..... Prof. Lawrence.
	Sub-Seniors, No. 2....	Rhetoric..... Prof. Jewell.
1.10 to 1.55.....	Juniors, No. 1.....	Algebra..... Mr. Goodwin.
	Juniors, No. 2.....	Arithmetic..... Miss Howell.
	Sub-Juniors, No. 1....	History..... Miss Butler.
	Sub-Juniors, No. 2....	History..... Miss Ostrom.
1.55 to 2.....	Dismission.	

PROGRAMME:

FOR THE LAST THIRD OF FALL TERM—SIX WEEKS.

9 A. M. to 9.20.....	Opening Exercises.	
	Seniors	Physiology..... Prof. Cooley.
	Sub-Seniors, No. 1....	Geometry..... Prof. Lawrence.
	Sub-Seniors, No. 2....	Science of Government... Mr. Goodwin.
9.20 to 10.05...	Juniors, No. 1.....	Grammar..... Prof. Jewell.
	Juniors, No. 2.....	History..... Miss Ostrom.
	Juniors, No. 3.....	Algebra..... Mr. Marean.
	Sub-Juniors, No. 1....	Intellectual Arithmetic.. Miss Butler.
	Sub-Juniors, No. 2....	Intellectual Arithmetic.. Miss Howell.
10.05 to 10.15	Rest.	
	Seniors	Moral Philosophy..... Principal.
	Sub-Seniors, No. 1....	Natural Philosophy..... Prof. Cooley.
	Sub-Seniors, No. 2....	Geometry..... Prof. Lawrence.
10.15 to 11.....	Juniors, No. 1.....	History..... Miss Ostrom.
	Juniors, No. 2.....	Algebra..... Mr. Goodwin.
	Juniors, No. 3.....	Grammar..... Mr. Marean.
	Sub-Juniors, No. 1....	Arithmetic..... Miss Butler.
	Sub-Juniors, No. 2....	Arithmetic..... Miss Howell.
11 to 11.10	Rest.	
	Seniors	Grammatical Analysis... Prof. Jewell.
	Sub-Seniors, No. 1....	Algebra..... Prof. Lawrence.
	Sub-Seniors, No. 2....	Natural Philosophy..... Prof. Cooley.
11.10 to 11.55...	Juniors.....	Writing..... Mr. Goodwin.
	Sub-Juniors, No. 1....	Algebra..... Miss Ostrom.
	Sub-Juniors, No. 2....	Algebra..... Miss Howell.
11.55 to 12.15	Rest.	
	Senior Gentlemen.....	Higher Mathematics..... Prof. Lawrence.
	Senior Ladies	Primary Teaching..... Miss Keyes.
	Sub-Seniors.....	Book-keeping..... Mr. Goodwin.
12.15 to 1.....	Juniors, No. 1.....	Intellectual Arithmetic.. Miss Howell.
	Juniors, No. 2.....	Geography..... Prof. Jewell.
	Sub-Juniors	Reading..... Miss Butler.
1 to 1.10.....	Rest.	
	Seniors.....	Agricultural Chemistry.. Prof. Cooley.
	Sub-Seniors, No. 1....	Rhetoric..... Prof. Jewell.
	Sub-Seniors, No. 2....	Higher Arithmetic..... Prof. Lawrence.
1.10 to 1.55....	Juniors, No. 1.....	Algebra..... Mr. Goodwin.
	Juniors, No. 2.....	Grammar..... Mr. Marean.
	Juniors, No. 3.....	History..... Miss Ostrom.
	Sub-Juniors, No. 1....	Grammar..... Miss Butler.
	Sub-Juniors, No. 2....	Grammar..... Miss Howell.
1.55 to 2.....	Dismission.	

Programme of Afternoon Exercises.

All the afternoon exercises of the Fall Term commence at 3½ and close at 4½. In the Spring Term they take place one hour later.

Instruction in vocal music :

Senior and Sub-Seniors on Mondays and Fridays. - }
 Juniors and Sub-Juniors on Tuesdays and Fridays } 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. Lawrence.
Juniors' No. 1	Miss Ostrom.
Juniors' No. 2	Miss Butler.
Sub-Juniors'	Miss Howell.

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 required 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 35th term:

<i>Seniors.</i>		<i>Seniors.</i>	
Mr. H. Clement	1	Miss M. E. Clark	2
Mr. F. Cogswell	3	Miss A. L. Dye	1
Mr. G. N. Green	1	Miss H. Duryee	1
Mr. W. B. Hard	2	Miss E. S. Fitch	1
Mr. W. E. Lewis	2	Miss J. L. McBurney	1
Mr. O. G. Moore	1	Miss S. M. Sexton	1
Mr. H. F. Olmstead	2	Miss M. H. Thompson	2
Mr. J. Skinner	2	Miss S. J. Tooker	3
		Miss H. E. Webster	3

<i>Sub-Seniors.</i>		<i>Sub-Seniors.</i>	
Mr. J. Barkley	1	Miss H. Dickinson	2
Mr. H. Dickson	1	Miss M. Hyde	1
Mr. A. H. Green	1	Miss M. McCutcheon	1
Mr. C. F. Hill	1	Miss L. C. Stevens	1
Mr. A. B. Hull	1		
Mr. J. T. Marean	4		
Mr. C. H. Willett	1		

<i>Juniors.</i>		<i>Juniors.</i>	
Mr. A. L. Clark	1	Miss S. Burrage	2
Mr. F. E. Gates	1	Miss H. Moffat	1
Miss M. J. Baker	1	Miss L. J. Stryker	1

<i>Sub-Juniors.</i>		<i>Sub-Juniors.</i>	
Miss C. V. Haff	1	Miss M. E. Shepherd	1
Miss S. M. Haff	1	Miss M. E. Wall	1

Writers selected for Wednesday exercises of the 36th term:

<i>Seniors.</i>		<i>Seniors.</i>	
Mr. J. Barkley	3	Miss G. L. Brayton	1
Mr. J. O. Blakeley	4	Miss A. A. Conde	2
Mr. A. H. Green	1	Miss K. A. Hiller	1
Mr. H. B. Higgins	2	Miss M. N. Mattoon	1
Mr. A. B. Hull	1	Miss J. L. McBurney	1

<i>Seniors.</i>		<i>Seniors.</i>	
Mr. J. T. Marean	3	Miss C. M. McWayne	2
Mr. F. A. Morrison	2	Miss K. A. Stebbins	3
Mr. C. H. Willett	2	Miss M. E. Whitaker	1
<i>Sub-Seniors.</i>		<i>Sub-Seniors.</i>	
Mr. R. Le Fevre	1	Miss S. Loomis	1
Mr. W. Roberts	2	Miss A. C. Merriman	3
Miss S. Burrage	3	Miss S. Purroy	1
Miss E. Cobb	1	Miss M. Townsend	1
		Miss A. Weston	1
<i>Juniors.</i>		<i>Juniors.</i>	
Mr. H. Cook	3	Miss S. M. Haff	3
Miss F. E. Blodgett	1	Miss M. McDermott	2
Miss C. F. Burrows	1	Miss N. Sharpe	1
Miss M. A. Hay	1	Miss H. J. Sherwood	1
Miss M. A. Hayden	1	Miss L. Smith	1
Miss C. V. Haff	1	Miss A. Tooker	2

Examinations.

The examinations at the close of each term are, in part, *written*, and in part *oral*. The questions for the written examinations 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 examinations at the close of the 35th term:

PHYSIOLOGY.—*Senior Class.*

Time—Four Hours.

1. Define physiology, anatomy.
2. What are the component parts of bone, and how does its composition vary during life?
3. Trace the food in the process of digestion through the different organs, and describe the changes it undergoes in each.
4. Describe the human stomach; also, the stomach of a herbivorous animal.

5. Describe the heart, and the office it performs.
6. How is the venous blood changed to arterial blood?
7. Describe the cerebellum.
8. What are the functions of the spinal marrow?
9. Describe the frontal sinus.
10. Describe the bones of the foot.
11. How is the spinal marrow guarded against shocks and compression?
12. How is the temperature of the body maintained?

CHEMISTRY.—*Seniors.*

Time—Four Hours.

1. Define the following terms, viz: Chemical Affinity, Mechanical Action, Chemical Action, Atom, Element, Equivalent.
2. Define the terms Isomorphism and Dimorphism.
3. Describe preparation and properties of Ozone.
4. How are the Acids of Oxygen compounds named?
5. How are the Salts named?
6. Required the Atomic volume of Bromine, the Atomic weight being 80, and the specific gravity 5.39. Write out the solution in full.
7. Given the Atomic volume, and specific gravity, how will you ascertain the Atomic weight? Illustrate.
8. Given the Atomic weight, and the Atomic volume, how will you obtain the specific gravity? Illustrate.
9. The combining number of Protoxyd of Nitrogen is 22, and 100 grains, by analysis, gives of Oxygen 36.36 grains, and Nitrogen 63.64 grains. How many equivalents of each in the compound? Write out the solution.
10. From 100 lbs. of Chlorate of Potassa, how many cubic inches of Oxygen may be obtained at 40 deg. Farenheit?
11. How much Oxygen is there in 50 lbs. of NO^5 ?
12. Describe the composition of plants, and the sources from which they obtain their food.

MORAL PHILOSOPHY.—*Senior Class.*

Time—Four Hours.

1. Define Ethics.
2. Prove that the moral quality of actions lies in the intention.
3. Define appetite; also, self love.

4. Define conscience, and prove that it is the most authoritative impulse of which we are susceptible.
5. State the distinction between right and wrong, and guilt and innocence.
6. Show that consciousness of innocence is not a proof of it.
7. Define human happiness.
8. Upon what principle is the system of Natural Religion founded?
9. Show that Natural Religion has failed as a means of moral reformation.
10. State some of the causes of this failure.
11. Show how we might anticipate the character of a Revelation intended to remedy the defects of Natural Religion.

GEOLOGY.—*Senior Class.*

Time—Four Hours.

1. Classify the Geological Agencies, and show wherein Geologists disagree respecting them.
2. Give the principal divisions of the stratified rocks, in the order of their position, commencing with the lowest.
3. Name the New York rocks in their order of position.
4. Define stratification, lamination, seam, dip, strike, fault.
5. Define Paleontology.
6. Write out the classification of the animal kingdom.
7. How does the longevity of the different classes of animals compare?
8. What are the characteristics of the vertebrata, of the articulata, and of the mullusca?
9. State the lithological characters of the Pleistocene, and the origin of the materials of this formation.
10. Give the geography of the Pleistocene period.
11. Give the upper and lower limits of drift, and name the prominent theories to account for this formation.
12. What theories have been proposed to account for the introduction of species?

MENTAL PHILOSOPHY.—*Senior Class.*

Time—Four Hours.

1. Show the relation of the metaphysical sciences, by giving a tabular statement of the distribution of Philosophy.
2. Give a tabular statement of the distribution of the cognitive faculties, according to Hamilton.

3. State the distinction between representative and intuitive cognition.
4. Define perception, sensation, and imagination.
5. In perception, *where* is the object perceived?
6. Classify the qualities of matter, and define them as percepts or sensations.
7. State the office of memory, according to Sir William Hamilton, also suggestion and recollection.
8. Define conception.
9. Define logical and real concepts.
10. What is judgment?
11. Define facts, and truths of consciousness.
12. State the three laws of thought.

ARITHMETIC.—*Sub-Senior Class.*

Time—Four Hours.

1. Explain wherein the French system of notation differs from the English.
Write out, in words, the value of 6 in the twelfth place, according to the English system; also, according to the French system of notation.
2. Define fractions, common and decimal.
3. Give an analysis of the rule for pointing off the quotient in division of decimals.
4. How will you convert a decimal repetend to an equivalent common fraction? Give an analysis of the rule.
5. Write the rule for finding the true remainder when you divide by the factors of a composite number. Give an analysis of this rule.
6. Explain, arithmetically, the extraction of the cube root, using the binomial formula.
7. What will be the cost, Federal money, to paper the walls of a room 11ft. high, 16ft. 6in. in length, and 13ft. 3in. in width, with paper at 2s. 6d., New England currency, per roll of 11 yards by 18 inches; allowing 10 inches in width for the base board?
8. A can do a piece of work in 10 days, B can do the same in 11 days, and C could do it in 12 days. In what time can all do it together, provided C works only half the time? Solve by proportion.
9. Three hundredths per cent. of a number is thirty-five ten thousandths; what is the number?

10. In selling a horse for \$150, 15 per cent. is lost; what would be the gain per cent. if the horse were sold for \$200?
11. Albany is $73^{\circ} 44'$ west longitude; Calcutta is $88^{\circ} 19'$ east longitude. At 10 o'clock, Albany time, what is the time at Calcutta?
12. A farmer buys a piece of land for \$1,600, and agrees to pay *principal and interest in three equal annual installments*; if the interest is 7 per cent., how much will that annual payment be?

GEOMETRY.—*Sub-Senior Class.*

Time—Four Hours.

1. In equal circles, chords equally distant from the centre, are equal; required the proof.
2. What are the conditions of equality in triangles? Demonstrate the first case.
3. What does π represent? What is its value, and how is it obtained?
4. The altitude of the frustum of a cone is 5ft. 3in.; the radius of its lower base is 2ft. 5in. and the radius of its upper base is 9in.; required the volume.
5. To find a triangle that shall be equivalent to a given polygon.
6. Distinguish between theorems and problems; between a solution and a demonstration; between an axiom and a postulate.
7. A stick of timber 35ft. long is 13in. square at one end, and a point at the other; how far from the large end, must we measure, to get half the solidity?
8. A line passing through a triangle parallel to one side, divides the other sides proportionally; required the demonstration.
9. The three sides of a triangular field are 71, 32, and 98 yards; required the area in acres.
10. The area of a sector is equal to its arc multiplied by half the radius; required the proof.
The circumference of a circle is 18ft.; required the area of a sector whose arc is 45° .
11. The base of an isosceles triangle is 6, and the opposite angle is 60° ; required the length of the other two sides, and the number of degrees in each of the other angles. Enunciate the theorems employed in the solution.

12. In a right angled triangle, having given the base and the sum of the perpendicular and hypotenuse, to find these two sides.

SCIENCE OF GOVERNMENT.—*Sub-Senior Class.*

Time—Four Hours.

1. What is a constitution?
2. When were the *articles of confederation* adopted by the American Colonies, and what were their defects?
3. When was the *Constitution of the United States* adopted; what objects was it designed to secure, and what changes did it institute in the government?
4. Why are the legislative, judicial, and executive powers committed to separate and distinct bodies; and to what or whom are they entrusted?
5. How is the legislative department of the United States government constituted?
6. When was the present Constitution of the State of New York adopted, and what are some of the fundamental rights secured by it?
7. What are the qualifications of electors in this State.
8. Describe the legislative departments of the State.
9. Trace the progress of a bill from its introduction into the Legislature until it becomes a law.
10. What are the duties and perogatives of the Governor?
11. What is the composition, respectively of the Canal Board, the Commissioners of the Canal Fund, and the Canal Commissioners?
12. Describe the State judiciary, giving the gradation, organization, and relations of the courts of the State.

RHETORIC.—*Sub-Senior Class.*

Time—Four Hours.

1. What is Rhetoric?
2. What is the governing end of all oratory?
3. How many, and what are the kinds of oratory; and how do you distinguish each?
4. What is the complete classification of the properties of style?
5. How many, and what are the faults against grammatical purity; and how do you define and exemplify each?

6. What kinds of sentential structure, does melody of arrangement require, or forbid ; and how do you define each ?
7. How many, and what are the kinds, of energy ; and how do you respectively define them ?
8. What are tropes ; and how do you classify, define and exemplify the several species ?
9. How do you distinguish comparison proper, simile, and contrast, from each other ; and what are examples of each ?
10. How do personification, apostrophe, and vision, differ ; and how do you exemplify each ?
11. What words are used figuratively, and what are the figures employed, in the following passage ?

“ You shall see a beautiful quarto page, where a neat rivulet of text shall meander through a meadow of margin.”

12. What fault, in the use of figures, occurs in the following passage, and how will you correct it :

“ Whether 'tis nobler in the mind to suffer
The stings and arrows of outrageous fortune,
Or take arms against a sea of troubles,
And by opposing, end them ?”

NATURAL PHILOSOPHY.—*Sub-Seniors.*

Time—Four Hours.

1. Define Philosophy ; also, Natural Philosophy.
2. Write out definitions of each of the following terms, viz : Force, Motion, Elasticity, Impenetrability, Centre of Motion, and Centre of Oscillation.
3. Derive the formulæ for falling bodies, by the Arithmetical method.
4. Derive the same by the Algebraic method.
5. Describe the Pendulum, and explain how it is used to determine the figure of the Earth.
6. If the length of a pendulum beating seconds is 39.1 inches, how long must it be to beat half seconds ?
7. A body moving freely under the influence of a constant force, passed over a space of 294 ; the space described the last period of time was 78 ; during how many equal periods did it move ?

8. A piece of wood whose specific gravity is 0.93, contains 160 cubic inches, and floats upon water; what volume of the wood is below the plane of flotation?
9. Define Chromatic Aberration; show how it is caused and how it is corrected.
10. A luminous body A, at a distance 40 inches, gives a shadow equal to that which B gives at a distance of 30 inches. What are the comparative intensities of the lights?
11. Describe the Human Eye.
12. Describe the Hydraulic Ram, and explain its operation.

ALGEBRA.—*Sub-Senior Class.**Time—Four Hours.*

1. Define the terms, Mathematics, Algebra.
2. Prove that the difference of the same powers of two quantities is exactly divisible by the difference of the quantities.
3. Define the terms equation, transformation, elimination, radical.
4. *Derive* a rule for multiplying radicals of the same degree.
5. Prove that the product of two negative factors is a positive quantity.
6. Write the quantity $3c^2xy^3$ in the form of a fraction whose numerator shall be a unit, and prove the two expressions equal.
7. Given $\frac{x-ax}{\sqrt{x}} - \frac{\sqrt{x}}{x} = 0$, to find x .
8. Given $\frac{x^2}{\frac{1}{2}x} - \frac{1}{2}(x + \frac{1}{b}) + (2\sqrt{x} + a\sqrt{x})^2 - \frac{x-a}{-b} = 1$, to find x .
9. Simplify the expression,

$$\frac{(\sqrt{a^2-d^2} + \sqrt{4d^2a^2-16d^4}) - (\sqrt{(a+b)^2(\frac{4}{a}-4d)} \times 4^{\frac{1}{2}}(a+d)^{\frac{1}{2}})}{\sqrt{16a^2-16a^2d}}$$
10. Given $s^2 - 6 - u^2 = 0$, and $\frac{1}{2} = -u + s$, to find u , and s .
11. Given $\frac{5}{2}x^8 - 3x^4 = 4$, to find x .
12. Extract the cube root of $60z^2x^4 - 90z^4x^2 + 8x^6 - 80z^3x^3 - 27z^6 + 108z^5x + 48zx^5$.

ARITHMETIC.—*Junior Class.**Time—Four Hours.*

1. Divide 8027006800107652 by forty-seven billions, six hundred and two millions, and one hundred thousands, and express the remainder in words.

2. Reduce 17 to a fraction whose denominator shall be $\frac{2}{3}$.
3. Reduce $\frac{4}{5}$, $\frac{1}{3}$ of $\frac{5}{7}$ of .13, and 1.7, to equivalent fractions having the common denominator 33.
4. Multiply 3 ft. 2' 4'' linear meas., by 4 ft. 8', 6'' square meas., and give the result in *feet* and *inches*.
5. Reduce $\frac{17}{85}$ to a decimal, and explain the process. Reduce .17 to a common fraction.
6. Add together .127 of a ton, $\frac{17}{5}$ of a pound Troy, and $\frac{1}{3}$ of a scruple.
7. Illustrate by examples the meaning of *Cause and Effect*. Give the rule for stating a problem in Proportion.
8. $\frac{2}{7}$ per cent. of $\frac{1}{9}$ is what per cent. of 18? Write the solution in full.
9. What is the interest of £18 6s. 4d., for 3 yrs. 2 mos. 18 dys., at $\frac{1}{4}$ per cent.? Express the above rate decimally.
10. B buys four shares of R.R. stock at a discount of 12 per cent. and receives a dividend of 10 per cent.; his profit is what per cent. of his investment? How many dollars did he receive?
11. Give the general rule for computing Interest. Rule for Compound Interest.
12. Find the bank discount on a note for \$726, which has four months and five days to run, at 5 per cent.; also the legal discount on the same. Give the rule for the last.

ALGEBRA.—*Junior Class.*

Time — Four Hours.

1. What is the Degree of a term? What is a Homogeneous Polynomial? Give an example.
2. Give the rule for division of polynomials, and illustrate it by an example.
3. Given $\frac{x-5}{2} - \frac{x-2}{3} = -\frac{x}{2} + \frac{13}{3}$ to find x . Verify the result.
4. How many methods of elimination are there? Give the rule for each.
5. Given $2x - \frac{y+3}{4} = 8$, and $4y - \frac{8-x}{3} = 24\frac{1}{2} - \frac{2y+1}{2}$ to find x and y .
6. How much brandy at 8s. per gallon must be mixed with one gallon spirits worth 3s. per gallon, so that by selling the mixture at 9s. per gallon there will be a profit of 30 per cent.?

7. Raise $a+b$ to the 6th power by the Binomial Formula.
8. What is a radical quantity? Illustrate.
9. Divide $4a\sqrt{a-b} + 3\sqrt{a^3 - a^2b}$ by $7a\sqrt{a^2 - b^2} \times a\sqrt{a-b}$.
10. Extract the square root of $4a^2x^2 + 16ab^2x + 16b^4 + 16b^2x^2 + 8ax^3 + 4x^4$.
11. How is the degree of an equation determined? What is a root of an equation? What is an incomplete equation?
12. Given $\frac{x}{4} + \frac{3-x}{x} = \frac{4}{x} - \frac{2x-3}{6}$ to find x .

HISTORY.—*Junior Class.*

Time—Four Hours.

1. Mention the principal States of Greece, and their condition during the time of Solomon, king of the Jews.
2. What was the Valerian law, and what change did it produce in the Government of Rome?
3. At what time was the Western Empire of the Romans overthrown, and what kingdoms were founded on its ruins?
4. What effect was produced upon the literature and religion of the British by the Saxon conquest?
5. Give the origin of the wars of the Roses.
6. How was William III related to James II?
7. Sketch the origin of the Caliphate, stating the countries which it included in its most prosperous state.
8. When, where, and by whom were the following battles fought, and what was the influence of each, viz:

a. Marathon.	d. Hastings.
b. Chalons.	e. Saratoga.
c. Tours or Poitiers.	f. Waterloo.

ENGLISH GRAMMAR.—*Junior Class.*

Time—Four Hours.

1. Name the different classes of phrases and sentences; define each, and give an example of each.
2. What are the modifications of Nouns? Define each.
3. Write the possessive plural of fox, ox, thou, church, man, valley, fly, which.
4. What are the tenses of the Indicative Mode? How is each formed in the Active Voice?
5. Give the second person, singular, of the verb *teach*, in all the tenses of the Indicative and Potential Modes, Passive Voice.

6. Give the rules of Syntax that apply to Verbs.
7. Explain and illustrate the difference between the Preposition and the Conjunction.
8. Construe *what* in the following sentences :
 - What! art thou still unsatisfied?
 - What art thou doing?
 - What we possessed was taken.
9. Diagram the following sentences, and parse the words in *italics* :

Rather than submit, I would die.

There are those *out there*, who should come in.

I had as *lief* not *be*, as *be*.

It hangs *alone* on the wall.

He never hesitated; *not he*.

There's no such word as *fail*.

10. Correct the following sentences, and give the reason for each correction :
 - You should always learn your scholars to speak proper.
 - Trust not him, whom, you know is dishonest.
 - What signifies good opinions when our practice is bad?
11. Diagram the following :
 - Who seeks a friend should come disposed
 - To exhibit, in full bloom disclosed,
 - The graces and the beauties
 - That form the character he seeks.
12. What is the object for which the diagram is used?

GEOGRAPHY.—*Junior Class.*

Time—Four Hours.

1. Define Geography, Mathematical, Physical, and Political.
2. What are the relations between Political and Physical Geography?
3. What are the proofs of the Earth's rotation from West to East on its axis.
4. Explain the cause of the inequalities in the lengths of days and nights.
5. Draw an outline map of Europe, and locate its political divisions.
6. Notice remarkable points of resemblance between the Eastern and Western Continents.
7. Write the names of the following states in the order of their

areas, viz : New York, France, Persia, Switzerland, Egypt, Pennsylvania and Patagonia.

8. Describe the most remarkable oceanic currents.
9. Give the boundaries of Persia.
10. Draw a small outline map of Persia.
11. Are degrees of latitude and longitude of uniform length? Why?
12. Draw an outline map of England, and locate the principal cities.

COMPOSITION.—*Sub-Junior Class.*

Time—Four Hours.

1. Define Punctuation; give the characters used, and tell the office of each.
2. Give the six special rules for the use of the comma.
3. Write sentences to illustrate the use of each of these characters.
4. Give the rules for the use of capital letters, and an example for each rule.
5. Write the derivatives obtained by adding *ing* to the following words: Censure, tolerate, hate, dye, die, singe, journey, play, debar, confer, busy, unpin: by adding *ed* to the following: Mat, shun, tan, respect, terrify, enjoy, journey, confer, defer.
6. Write the plural of valley, lily, attorney, piano, potato, motto, hoof, knife, calf, goose, fox, ox, gas, spoonful; and the singular and plural possessive of hour, man, I, you, lynx, world, being, action, James, Tully, Ostrom.
7. Define style, and mention the essential properties of a good style.
8. In what does strength consist? Give the rules for its promotion.
9. Name the five leading divisions in prose composition.
10. Mention the principal requisites of a good letter; describe the date, address, the clause of respect at the close, and the superscription.
11. Write a note of excuse for absence from school, and give a reason.
12. Write the journal of yesterday.

UNITED STATES HISTORY.—*Sub-Junior Class.**Time—Four Hours.*

1. Give an account of the voyages and discoveries of the Cabots.
2. What was the date of the settlement of New York?
3. Give an account of the settlement of Massachusetts.
4. When was New Netherlands surrendered to the English?
5. Give an account of the expedition against Louisburg in 1758.
6. When, where, and for what object did the first congress of the Colonies assemble?
7. Give an account of the battles of Lexington and Bunker Hill.
8. Give an account of the Canada expedition under Arnold.
9. What was the character of the "Boston Port Bill," and what was the immediate cause of its enactment?
10. What aid did England receive from the German States in her attempts to subdue the Colonies?
11. Give an account of the battle of Long Island, and the retreat of Washington.
12. Mention the Presidents of the United States, giving the term of office of each.

GEOGRAPHY.—*Sub-Junior Class.**Time—Four Hours.*

1. Define latitude, longitude, great circle, zone, tropic.
2. What proportion of the earth's surface is water?
3. What is the relative size of each of the grand divisions?
4. Mention the oceans in the order of size.
5. Mention the political divisions of the Western continent in the order of size.
6. Draw an outline map of the State of New York on a scale of one inch to one hundred miles, and locate the following places, viz.: Buffalo, Dunkirk, Elmira, Rochester, Utica, Oswego, Plattsburgh, Ticonderoga, and West Point.
7. Define the terms scale, size.
8. Give the boundaries of Virginia.
9. Draw an outline map of Kentucky about the same size as No. 6.
10. Give a description of the State of South Carolina.

11. Draw a map indicating the position of the principal West India islands.
12. Describe the physical features of North America.

ARITHMETIC.—*Sub-Junior Class.*

Time—Four Hours.

1. Express by figures the following number : Two hundred and eighty-seven trillions, ninety-one millions, three hundred and two thousands, four hundred and five. Express in words the number, 1027850040068700.
2. Divide 824067 by 300, using the *prime factors* of the divisor, and give the true remainder.
3. Divide 82765004 by 37000.
4. Write the following tables : English Money, Linear Meas., Square Meas., Wine Meas., Avoirdupois Weight, and Troy Weight.
5. Find the greatest common divisor of 96, 156, and 254. Find the least common dividend of 1, 2, 3, 4, 8, 12, 16, and 20.
6. Reduce $\frac{2}{3}$ of $\frac{3}{5}$ of $\frac{4}{7}$ of $\frac{5}{2}$ of $\frac{7}{4}$ to a simple fraction by cancellation.
7. Add $\frac{1}{3}$ of a ton to $\frac{4}{5}$ of an ounce.
8. Divide 37.8901726 by .00000002.
9. What will .031 hhds. of wine cost at 7 cents per gill ?
10. If four men, working $\frac{3}{7}$ of a day, can build four rods of wall, how many men, working $\frac{8}{9}$ of a day can build $\frac{2}{3}$ as much ? Solve by Proportion.
11. $\frac{1}{3}$ is what per cent. of $\frac{3}{4}$?
12. If I send \$2000 to a commission merchant, with which sum he is to buy goods and pay his own commission, how many dollars' worth of goods will he purchase, and what will he receive, his commission being $\frac{1}{4}$ per cent. ?

ALGEBRA.—*Sub-Junior Class.*

Time—Four Hours.

1. Give all the signs used in Algebra, and explain their meaning.
2. Define and illustrate by examples the terms, co-efficient, exponent, term, monomial, parenthesis, and numerical value of an expression.
3. What is the numerical value of the expression :

$$\left\{ \left[\left(\frac{a}{2} - \frac{b+c}{4} \right) \left(\frac{a-b}{c} - \frac{1}{d} \right) \right] - \left(\frac{a+b}{e} - \frac{d}{2} \right) \right\}^2, \text{ if } a=1, b=2, c=3, d=4 ?$$

4. Multiply $a^2+2ab-b^2$ by $(b-a)^2$.
5. Divide $-5a^4b+b^5-5ab^4+10a^2b^3+a^5-8a^3b^2$ by $b^2-2ab+a^2$.
6. Factor (a^4-b^4) . Give the three principal theorems by aid of which we are enabled to factor certain polynomials.
7. Find the greatest common divisor of x^3-3x+2 and x^3+4x-5 .
8. Find least common multiple of $1-x$, $1+x$, and $1+x^2$.
9. Add $\frac{4a+4b}{a^2-b^2}$, $\frac{3a-9}{a^2-2ab+b^2}$, $\frac{2a-b^2}{a-b}$ together.
10. Subtract $\frac{a+6-c}{3bc}$ from $\frac{a+2b-ac}{9b^2c}$.
11. Multiply $\frac{x^2-y^2}{ax}$, $\frac{x}{x+y}$, and $\frac{a}{x-y}$ together.
12. Divide $\frac{x^2-2xy+y^2}{ab}$ by $\frac{x-y}{bc}$.

ENGLISH GRAMMAR—*Sub-Junior Class.*

Time—Four Hours.

1. Define English Grammar, and state into what it is divided.
2. Classify words according to their uses.
3. Give the complete classification of adjectives, and examples of each kind.
4. Define the participle, and give its classification.
5. Name the principal parts of the verb *teach*, and conjugate it in the Indicative and Potential Prior Past.
6. Define *variable words*, and state the different offices of the following words, viz: *as*, *but*, *neither*, and *thou*.
7. Classify phrases according to their form, and give examples.
8. Write the analysis of the phrase, *To be dangerously ill, and actually dying*.
9. Write, in diagram, the phrase, *Having truly resolved to be faithful in his own proper sphere*.
10. Define the sentence.
11. Write the analysis of the sentence, *The man himself stood silent, and listened as if his life depended upon his hearing*.
12. Write, in diagram, the sentence, *Never was a mortal more perplexed as to his prospects in the future, than I who, while I have no fear for my life, am concerned as to my success*.