CATALOGUE

OF THE

OFFICERS AND STUDENTS

OF

TRINITY COLLEGE.

1889-90.

PRO ECCLESIA ET PATRIA.

CATALOGUE

OF THE

OFFICERS AND STUDENTS

OF

TRINITY COLLEGE.

1889-90.

_____

PRO ECCLESIA ET PATRIA.

_____

TRINITY COLLEGE,

HARTFORD, CONNECTICUT.

THE charter of Washington College was granted in 1823 by the General Assembly of the State of Connecticut; and by vote of the Trustees, in consequence of the liberal gifts of citizens of Hartford, the College was located in that city. In 1824 the work of instruction was begun; and two buildings, Seabury Hall and Jarvis Hall, were erected on an ample site near the city. In 1845 Brownell Hall was built; and in the same year, on the petition of the Alumni and the Corporation, the name of the College was changed to TRINITY COLLEGE; and the Alumni, who had formed a voluntary Association in 1831, were organized into a constituent part of the Academic body. In 1883 the charter was so amended as to provide for the election of three of the Trustees by the Alumni.

The College campus having been sold in 1872 to the city of Hartford as a site for the State Capitol, a new site of about eighty acres was purchased; and ground was broken in 1875 for the new buildings, which were occupied in 1878. Five years later the west side of the great quadrangle, more than six hundred feet in length, was completed by the erection of the central building, which, after the name of its donor, is called Northam Towers. The St. John Observatory was built in 1883, and the President's house in 1885. The new Gymnasium and Alumni Hall, erected by the generosity of Junius S. Morgan, Esq., of London, and others whose names are printed in the catalogue for 1886–87, was completed in 1887; and the Jarvis Hall of Science, the gift of George A. Jarvis, Esq., of Brooklyn, N. Y., was completed in 1888.

Five professorships are wholly or partially endowed: the Hobart Professorship, founded in 1834 by gifts from the corporation of Trinity Church, New York, the Messrs. Warren, of Troy, and other donors for the most part resident in the State of New York; the Seabury Professorship, founded in 1837 by the legacy of Nathan Warren, Esq., of Troy, N. Y., and by other subscriptions; the Scovill Professorship, founded in 1854 by Messrs. J. M. L. Scovill and William H. Scovill, of Waterbury, Conn.; the

Brownell Professorship, founded in 1856 by the legacy of Mrs. Sarah Gregor, of Norwalk, Conn.; and the Northam Professorship, founded in 1882 by the legacy of Charles H. Northam, Esq., of Hartford.

The names of other benefactors who have founded scholarships or established special funds are given on later pages of this Catalogue. The College has also at different times received liberal gifts for the Academic funds, of which the largest have been those from the legacies of Chester Adams, Esq., of Hartford, in 1871, of Charles H. Northam, Esq., in 1882, and of Stephen M. Buckingham, Esq., of Poughkeepsie, N. Y., in 1887. The largest gifts to the building funds, besides those already mentioned, have been from the legacies of the Rev. Dr. Wheaton, ex-President of the College, in 1862, and of Mrs. Charles H. Northam in 1884.

The requirements for admission and the course of instruction for degrees in the Arts have always been practically the same as in the other New England Colleges. The College has from the first made provision for the admission of students in special courses; and in 1884 three new courses of study were established, two of which lead to a degree in Science, and elective studies were introduced into all the courses. Copies of catalogues and examination papers, and information concerning the courses of instruction, scholarships, etc., can be obtained from the President or from the Secretary of the Faculty.

The last edition of the Quinquennial Catalogue of the officers and graduates of the College was published in May, 1885. It is requested that memoranda of errors or omissions in this Catalogue, or of material for the next edition, be sent to the Professor of Latin.

CONTENTS.

COLLEGE CALENDAR.

1889.

Sept.	19.	*Thursday.*	Christmas Term begins.
Nov.	1.	*Friday.*	All Saints' Day. Holiday.
"	28.	*Thursday.*	Thanksgiving-Day.
Dec.	13.	*Friday.*	Christmas Examinations.
"	14.	*Saturday.*	" "
"	16.	*Monday.*	" "
"	17.	*Tuesday.*	" "
"	18.	*Wednesday.*	" "
"	19.	*Thursday.*	" " Appointment of Toucey Scholar.

Christmas Vacation begins.

1890.

Jan.	2.	*Thursday.*	Trinity Term begins.
Feb.	19.	*Wednesday.*	Ash-Wednesday.
"	22.	*Saturday.*	Holiday. Prize Version Appointments published.

Oratorical Prize Contest.

April	4.	*Friday.*	Good Friday.
"	16.	*Wednesday.*	English Prize Essays handed in.
"	18.	*Friday.*	Easter Recess begins.
"	28.	*Monday.*	Easter Recess ends.
"	29.	*Tuesday.*	English Literature Prize Examination.
"	30.	*Wednesday.*	Chemical Prize Essays handed in.
May	2.	*Friday.*	Tuttle Prize Essays handed in.
"	3.	*Saturday.*	Latin Prize Examination.
"	10.	*Saturday.*	Mathematical Prize Examination.
"	15.	*Thursday.*	Ascension-Day.
"	22.	*Thursday.*	Prize Version Declamations.
June	1.	*Sunday.*	Trinity Sunday.
"	4.	*Wednesday.*	Senior Examinations.
"	5.	*Thursday.*	" "
"	6.	*Friday.*	" "
"	7.	*Saturday.*	" "
"	9.	*Monday.*	" "

June	10.	*Tuesday.*	Senior Examinations. Trinity Examinations.
"	11.	*Wednesday.*	" " " "
"	12.	*Thursday.*	Trinity Examinations.
"	13.	*Friday.*	" " Senior Standing published.
"	14.	*Saturday.*	" "
"	16.	*Monday.*	" "
"	17.	*Tuesday.*	" "
"	18.	*Wednesday.*	" "
"	19.	*Thursday.*	" "
"	20.	*Friday.*	Award of Prizes.
"	22.	*Sunday.*	Baccalaureate Sermon.
"	23.	*Monday.*	Junior Standing published.
"	23.	*Monday.*	Examinations for Admission.
"	24.	*Tuesday.*	" " " Class-Day.
"	24.	*Tuesday.*	Annual Meeting of the Corporation (evening).
"	25.	*Wednesday.*	Examinations for Admission.
"	25.	*Wednesday.*	Annual Meetings of the Corporation and of the Association of the Alumni.
"	26.	*Thursday.*	SIXTY-FOURTH COMMENCEMENT. Trinity Vacation begins.

Sept.	16.	*Tuesday.*	Examinations for Admission begin.
"	18.	*Thursday.*	Christmas Term begins.
Dec.	23.	*Tuesday.*	Christmas Term ends.

In 1890-91 the Christmas Vacation will be two weeks.

SENATUS ACADEMICUS.

VISITORS.

CORPORATION.

The Rt. Rev. John Williams, D.D., LL.D.,   Middletown, Ct.

The Rev. The President of the College,

    ex officio President,   Hartford.

The Rev. E. Edwards Beardsley, D.D., LL.D.,   New Haven, Ct.

The Rev. George H. Clark, D.D.,   Hartford.

William C. Peters, M.A.,   Boston, Mass.

Richard W. H. Jarvis, M.A.,   Hartford.

Charles J. Hoadly, LL.D., *Secretary*,   Hartford.

George Beach, Esq.,   Hartford.

The Rt. Rev. Benjamin H. Paddock, D.D.,   Boston, Mass.

The Rev. George S. Mallory, D.D.,   New York City.

The Hon. Dwight W. Pardee, LL.D.,   Hartford.

Charles E. Graves, M.A., *Treasurer*,   New Haven, Ct.

The Rt. Rev. William W. Niles, D.D.,   Concord, N. H.

The Rev. Sanford J. Horton, D.D ,   Cheshire, Ct.

The Rev. William Tatlock. D.D.,   Stamford, Ct.

William Hamersley, M.A.,   Hartford.

The Rev. Henry A. Coit, D.D.,   Concord, N. H.

James Ivers Lewis, M.A.,   New London, Ct

Luke A. Lockwood, M.A.,   New York City.

The Rev. Francis Goodwin, M.A.,   Hartford.

William E. Curtis, M.A.,   New York City.

J. Pierpont Morgan, Esq.,   New York City.

W. A. M. Wainwright, M.A., M.D.,   Hartford.

Robert H. Coleman, B.A.,   Cornwall, Pa.

BOARD OF FELLOWS.

PRESIDENT.

The Chancellor of the College.

FELLOWS.

Gurdon W. Russell, M.A., M.D.
Charles D. Scudder, M.A., M.D.
Franklin H. Fowler, M.A.
The Rev. Lucius Waterman, M.A.
The Rev. George W. Douglas, D.D.
Edward D. Appleton, B.A.

JUNIOR FELLOWS.

Percy S. Bryant, M.A.
The Rev. J. H. Barbour, M.A.
The Rev. John T. Huntington, M.A.
The Rev. John J. McCook, M.A.
The Rev. F. W. Harriman, M.A.
William C. Skinner, M.A.

ASSOCIATION OF THE ALUMNI.

PRESIDENT.

John H. S. Quick, M.A.

VICE-PRESIDENT.

The Rev. Brady E. Backus, D.D.

SECRETARY.

George L. Cooke, M.A.

TREASURER.

Howard C. Vibbert, M.A.

STANDING COMMITTEE.

The President.
The Treasurer.
J. Cleveland Cady, M.A.
The Rev. Samuel Hart, D.D.
The Rev. J. H. Barbour, M.A.

FACULTY.

The Rev. GEORGE WILLIAMSON SMITH, D.D., LL.D.,

PRESIDENT ; *and Hobart Professor of Metaphysics.*

115 Vernon Street (office, 13 Seabury Hall).

The Rev. THOMAS R. PYNCHON, D.D., LL.D.,

Brownell Professor of Moral Philosophy.

90 Vernon Street.

The Rev. SAMUEL HART, D.D.,

Professor of the Latin Language and Literature.

22 Jarvis Hall.

The Rev. ISBON T. BECKWITH, PH.D.,

Professor of the Greek Language and Literature.

14 Seabury Hall.

The Rev. FLAVEL S. LUTHER, M.A.,

Seabury Professor of Mathematics and Astronomy; and Secretary.

74 Vernon Street.

The Rev. HENRY FERGUSON, M.A.,

Northam Professor of History and Political Science.

123 Vernon Street.

CHARLES FREDERICK JOHNSON, M.A.,

Professor of English Literature.

69 Vernon Street.

The Rev. JOHN J. McCOOK, M.A.,

Professor of Modern Languages.

114 Main Street.

WM. LISPENARD ROBB, PH.D.,

Professor of Physics.

21 Jarvis Hall.

ROBERT BAIRD RIGGS, PH.D.,

Scovill Professor of Chemistry and Natural Science.

15 Seabury Hall.

The Rt. Rev. JOHN WILLIAMS, D.D., LL.D.

Lecturer on History.
Middletown.

WILLIAM A. M. WAINWRIGHT, M.A., M.D.,

Lecturer on Anatomy and Physiology.
453 Main Street.

WILLIAM HAMERSLEY, M.A.,

Lecturer on Law.
372 Main Street.

CHARLES D. SCUDDER, M.A., M.D.,

Lecturer on Hygiene.
New York City.

CHARLES DUDLEY WARNER, L.H.D.,

Lecturer on English Literature.
37 Forest Street.

FREDERICK C. ROBERTSON, M.A.,

Instructor in Elocution.
Boston, Mass.

HERBERT W. CONN, Ph.D.,

Instructor in Natural Science.
Middletown.

EDWIN C. JOHNSON, 2D, B.A.,

Instructor in Mathematics.
61 Northam Towers.

FREDERICK H. BEERS, B.S.,

Assistant in the Chemical and Physical Laboratories.
6 Jarvis Hall.

The stated meetings of the Faculty are held every Friday morning at eleven o'clock.

UNDERGRADUATES.

SENIORS.

NAME.	RESIDENCE.	ROOM.
Henry Hobart Barber,	*Washington, N. C.*	25 J. H.
Robert McClelland Brady (s.),	*Detroit. Mich.*	17 S. H.
Erastus Brainard Bulkeley (s.),	*New York City.*	17 S. H.
Wm. Eliphalet Adams Bulkeley (L. s.),	*Hartford.*	9 J. H.
Theodore Lathrop Cheritree,	*Oak Hill, N. Y.*	36 J. H.
Gilbert Payson Coleman,	*Cincinnati, O.*	36 J. H.
Thomas Anderson Conover,	*South Amboy, N. J.*	13 J. H.
Anthon Temple Gesner,	*Hyde Park, N. Y.*	65 N. T.
Clifford Standish Griswold,	*Wethersfield, Ct.*	51 N. T.
Robert Hamilton Hutchins,	*Concord, N. H.*	35 J. H.
John Stockton Littell,	*Wilmington, Del.*	37 J. H.
Riverius Manning Luther (L. s.),	*Brooklyn, Ct.*	56 N. T.
Robert Le Blanc Lynch,	*Boston, Mass.*	32 J. H.
George Thurston Macauley,	*Detroit, Mich.*	9 J. H.
Warren McConihe,	*Troy, N. Y.*	27 J. H.
Edward McPherson McCook,	*Hartford.*	114 Main St.
John Butler McCook (L. s.),	*Hartford.*	114 Main St.

NAME.	RESIDENCE.	ROOM.
Guy Wilbur Miner,	*North Adams, Mass.*	25 J. H.
William Pressey,	*Cleveland, O.*	52 N. T.
William Harry Chichelé Pynchon,	*Hartford.*	62 N. T.
George Winthrop Sargent,	*Boston, Mass.*	33 J. H.
Philip Smith,	*Detroit, Mich.*	43 J. H.
Uriel Heber Spencer,	*Hartford.* 37 Washington St.	
George Thornton Warren,	*Troy, N. Y.*	29 J. H.
John Williams,	*Seymour, Ct.*	6 J. H.

JUNIORS.

NAME.	RESIDENCE.	ROOM.
Stephen Howard Alling,	*Suffield, Ct.*	Suffield.
Frank Marshall Barber (L. S.),	*Pawtucket, R. I.*	58 N. T.
John Bird Burnham,	*Wilmington, Del.*	59 Allen Pl.
William Hooper Coster (S.),	*Pittsburgh, Pa.*	16 J. H.
Edward Bronson Finch,	*Greenfield, Mass.*	11 J. H.
Arthur Collins Graves,	*New Haven, Ct.*	42 J. H.
Arthur Leslie Green,	*Chicago, Ill.*	2 J. H.
Irenus Kittredge Hamilton, Jr. (S.),	*Chicago, Ill.*	31 J. H.
George Newell Hamlin,	*New York City.*	37 J. H.
William Cleveland Hicks, Jr.,	*Summit, N. J.*	18 S. H.
Frederick Reed Hoisington (L. S.),	*Coventry, Ct.*	11 J. H.
Harry Howard,	*Hartford.*	91 Asylum St.
Isaac Wayne Hughes,	*Chocowinity, N. C.*	25 J. H.
William Sanford Kingsbury (S.),	*Glastonbury, Ct.*	39 J. H.
Edward Rutledge Lampson, Jr.,	*Waterbury, Ct.*	20 J. H.
Edwin Franklin Lawton (S.),	*West Cheshire, Ct.*	40 J. H.
William Hugh McCulloch,	*Cottonwood, La.*	15 J. H.
*Joseph Mayo, Jr.,	*Alta, Ill.*	13 Vernon St.
March Chase Mayo,	*Alta, Ill.*	13 Vernon St.
Herbert Parrish,	*Grand Rapids, Mich.*	55 N. T.

* Died October 18, 1889.

NAME.	RESIDENCE.	ROOM.
Victor Cox Pedersen,	*New York City.*	51 N. T.
John Fields Plumb,	*Litchfield, Ct.*	120 Sigourney St.
Ernest Albert Pressey,	*Cleveland, O.*	52 N. T.
Lucian Waterman Rogers,	*Providence, R. I.*	55 N. T.
Heyward Scudder,	*New York City.*	28 J. H.
Charles Norman Shepard,	*Bristol, Ct.*	40 J. H.
Thomas Burke Smith,	*Hartford.*	18 Oak St.
Elias Boudinot Stockton,	*Germantown, Pa.*	53 N. T.
Charles Hooker Talcott (L. s.),	*Hartford.*	8 J. H.
Theodore Payne Thurston,	*Minneapolis, Minn.*	38 J. H.
David Van Schaack,	*Kinderhook, N. Y.*	19 J. H.
Robert Walker,	*Waltham, Mass.*	5 J. H.
George Hermann Wright,	*New Milford, Ct.*	23 J. H.
Marion Randolph Wright (s.),	*Wilmington, N. C.*	30 J. H.
William George Wright,	*New Milford, Ct.*	23 J. H.
Charles Herbert Young,	*Joliet, Ill.*	1 J. H.

SPECIAL STUDENT, NOT A CANDIDATE FOR A DEGREE.

Colin Scott Pitblado,	*Hartford.*	214 High St.

SOPHOMORES.

NAME.	RESIDENCE.	ROOM.
Samson Almy (L. S.),	*Tilton, N. H.*	35 J. H.
John Russell Bacon (S.),	*Danbury, Ct.*	34 J. H.
Albert Crabtree,	*Fall River, Mass.*	5 J. H.
Edward Alexander Dingwall (S.),	*Detroit, Mich.*	43 J. H.
Thomas Langdon Elwyn (L. S.),	*Philadelphia, Pa.*	33 J. H.
George Herbert French (S.),	*New York City.*	66 N. T.
William Leslie French,	*New York City.*	66 N. T.
Frederic Beecher Fuller (S.),	*Concord, N. H.*	2 J. H.
Thaddeus Welles Goodridge,	*Exeter, N. H.*	19 S. H.
Harmon Sheldon Graves,	*Burlington, Vt.*	42 J. H.
Clarence Loines Hall (S.),	*Hartford.*	24 J. H.
Gordon Hall (L. S.),	*Marquette, Mich.*	26 J. H.
Otis Grant Hammond (L. S.),	*Concord, N. H.*	26 J. H.
Elijah Kent Hubbard, Jr. (L. S.),	*Middletown, Ct.*	18 S. H.
Romilly Francis Humphries,	*New York City.*	65 N. T.
Charles Amos Johnson (S.),	*Norwich, Ct.*	16 J. H.
Hugh Kidder,	*Owego, N. Y.*	1 J. H.
Edward Gardner Lewis (L. S.),	*New York City.*	18 J. H.
Thomas McKean, Jr. (L. S.),	*Philadelphia, Pa.*	57 N. T.
Malcolm Stuart McConihe,	*Troy, N. Y.*	27 J. H.
Roland Hawley Mallory (L.),	*Bridgeport, Ct.*	28 J. H.

2

NAME.	RESIDENCE.	ROOM.
William Joseph Miller,	*North East, Md.*	63 N. T.
Charles Melvin Murphy (s.),	*Manchester, Ct.*	Manchester.
John Paine,	*Troy, N. Y.*	29 J. H.
Ernest Randall,	*Essex, Ct.*	64 N. T.
Rollin Sanford Saltus,	*East Orange, N. J.*	16 S. H.
Alexander Hamilton Sibley,	*Detroit, Mich.*	10 J. H.
Charles Edward Taylor,	*Nashua, N. H.*	32 J. H.
Charles Christopher Trowbridge (L. s.),	*New Haven, Ct.*	10 J. H.
James Archibald Turnbull,	*Hartford.*	16 S. H.

SPECIAL STUDENT, NOT A CANDIDATE FOR A DEGREE.

Isaac Daw Russell,	*New Britain, Ct.*	34 J. H.

FRESHMEN.

NAME.	RESIDENCE.	ROOM.
Harry Ward Baldwin,	*Mendon, Ill.*	49 N. T.
Charles Clarence Barton, Jr.,	*Newton, Mass.*	24 J. H.
Robert Peck Bates,	*Willimantic, Ct.*	38 J. H.
Carter Lee Bowie,	*Collington, Md.*	4 J. H.
John Charles Bulkeley (L. S.),	*Hartford.*	7 J. H.
Henry Safford Candee (L. S.),	*Cairo, Ill.*	31 J. H.
Lawson Averell Carter,	*Cooperstown, N. Y.*	20 J. H.
Clarke Churchman (L. S.),	*Wilmington, Del.*	64 N. T.
William French Collins,	*Brattleboro', Vt.*	44 J. H.
William Eugene Conklin,	*Hartford.*	1 Wolcott St.
Richard Stevens Conover, Jr.,	*New Brunswick, N. J.*	13 J. H.
James Cullen, Jr.,	*Cincinnati, O.*	19 J. H.
Ellis Bedell Dean,	*North Guilford, Ct.*	59 N. T.
Ernest Leon Dickinson,	*Essex, Ct.*	14 J. H.
Thomas Hale, Jr.,	*Plainfield, N. J.*	57 N. T.
George Derwent Hartley,	*Utica, N. Y.*	15 J. H.
Robert Cairns Hayden,	*Caldwell, N. Y.*	48 N. T.
William Chapin Hill (L. S.),	*Philadelphia, Pa.*	3 J. H.
Charles Albert Horne,	*Dover, N. H.*	61 N. T.
Louis de Koven Hubbard,	*Middletown, Ct.*	54 N. T.
Samuel Henry Jobe,	*New York City.*	49 N. T.

NAME.	RESIDENCE.	ROOM.
Charles Judd,	*Kent, Ct.*	50 N. T.
Charles Augustus Lewis,	*New London, Ct.*	8 J. H.
John Williams Lewis,	*New York City.*	18 J. H.
Luke Vincent Lockwood,	*Riverside, Ct.*	41 J. H.
William Porter Niles,	*Concord, N. H.*	19 S. H.
William Osgood Orton (L. S.),	*Philadelphia, Pa.*	3 J. H.
Burton Parker,	*Hartford.*	7 J. H.
Reginald Pearce,	*Portsmouth, R. I.*	58 N. T.
Henry Hubbard Pelton,	*Middletown, Ct.*	17 J. H.
Henry Hulbert Porter,	*Unionville, Ct.*	14 J. H.
William Hermon Rouse,	*Cobalt, Ct.*	50 N. T.
Herbert Mendenhall Smith,	*Bridgewater, Ct.*	59 N. T.
William Croswell Doane Willson (L. S.),	*Lansingburgh, N.Y.*	12 J. H.
Richard Henry Woffenden,	*North Adams, Mass.*	39 J. H.

SPECIAL STUDENTS, NOT CANDIDATES FOR A DEGREE.

Edwin Stanton Allen,	*Hartford.*	12 J. H.
Henry Augustus Cary,	*New York City.*	41 J. H.
Frederick Bradford Cole,	*Warren, R. I.*	63 N. T.
Alfred Gildersleeve,	*Gildersleeve, Ct.*	4 J. H.
Louis Desiré Peugnet,	*St. Louis, Mo.*	30 J. H.
Paris Becker Stauffer,	*Mount Joy, Pa.*	57 N. T.
George Hewson Wilson,	*Albany, N. Y.*	44 J. H.
Thomas Henry Yardley,	*Newport, R. I.*	17 J. H.

SUMMARY.

	Course in Arts.	Course in Letters and Science.	Course in Science.	Course in Letters.	Special Students.	Total.
Seniors,	20	3	2			25
Juniors,	28	3	5		1	37
Sophomores,	14	8	7	1	1	31
Freshmen,	30	5			8	43
Total,	92	19	14	1	10	136

ABBREVIATIONS.

S. H.,	.	Seabury Hall.
J. H.,	.	Jarvis Hall.
N. T.,	.	Northam Towers.
S.,	.	Course in Science.
L. S.,	.	Course in Letters and Science.
L.,	.	Course in Letters.

COURSES OF INSTRUCTION.

The College offers four Courses of Instruction, viz.:

    I. A COURSE IN ARTS;
    II. A COURSE IN LETTERS AND SCIENCE;
    III. A COURSE IN SCIENCE;
    IV. A COURSE IN LETTERS.

The courses extend over four years, with the exception of the Course in Science, which is completed in three years.

Students completing the Course in Arts receive the degree of Bachelor of Arts. Students completing the Course in Letters and Science, or the Course in Science, receive the degree of Bachelor of Science.

Students who do not propose to pursue all the studies of any of the regular courses are permitted, under the name of Special Students, to recite with any class in such studies as upon examination they are found qualified to pursue. They are subject to the same rules and enjoy the same privileges as other students; and, upon honorable dismissal, they are entitled to a certificate from the President, stating the studies which they have pursued during their residence in the College.

The degree of Master of Arts will be conferred upon Bachelors of Arts of three years' standing, who shall, by examination or otherwise, satisfy the Faculty that they have successfully pursued a course of study equivalent to the work of one academic year. Candidates for this degree desiring to be examined by the Faculty, must make application before the first day of May. Candidates desiring to offer certificates of examinations passed elsewhere, in place of an examination by the Faculty, are required to present such certificates before the fifteenth day of June. Communications concerning courses of study and examinations should be addressed to the Professor of Greek. A diploma-fee of five dollars is charged, which should be sent to the Treasurer of the College before Commencement-week.

REQUIREMENTS FOR ADMISSION.

I. COURSE IN ARTS.

Candidates for admission to the Freshman Class are examined in the following books:

GREEK.

Grammar (Hadley or Goodwin).
Xenophon: Anabasis, four Books.
Homer: Iliad, three Books, with Prosody.
Prose Composition (Jones or White: the exercises in the first half of the book).
History of Greece.
[The translation of average passages, not previously read, from Xenophon and Homer will be accepted as an alternative to the above-mentioned quantities in these authors.]

LATIN.

Grammar.
Caesar: Gallic War, four Books.
Virgil: Aeneid, six Books, with Prosody.
Cicero: The Orations against Catiline, and that for the Poet Archias.
Prose Composition: Translation into Latin of a passage of connected English narrative, based upon some passage in Caesar's Gallic War.
Roman History: Outlines, to the death of Marcus Aurelius (Creighton).
Ancient Geography.
Candidates are also examined at sight upon average passages from Caesar's works, from Virgil's Aeneid and Ovid's Metamorphoses, and from Cicero's Orations.

MATHEMATICS.

Arithmetic, including the Metric System.
Algebra, through Radicals and Quadratic Equations, together with Proportion, Progressions, and the Binomial Theorem.
Plane Geometry.

ENGLISH.

Each candidate is required to write a short English composition, correct in spelling, punctuation, grammar, division by paragraphs, and expression, upon a subject announced at the time of the examination. In 1890 the subject will be chosen from the following works: Shakspeare's *Julius Caesar* and *Midsummer Night's Dream;* Coleridge's *Ancient Mariner;* Longfellow's *Evangeline;* Macaulay's *Essay on Lord Clive;* Thackeray's *English Humorists;* Webster's *First Bunker-Hill Oration;* Scott's *Quentin Durward;* George Eliot's *Silas Marner;* Hawthorne's *House of the Seven Gables.*
Each candidate will also be required to criticise specimens of English composition.

Note.— The works from which the subject of the composition will be chosen in the following years are:

In 1891: Shakspeare's *Julius Caesar* and *Merchant of Venice ;* Coleridge's *Ancient Mariner ;* Longfellow's *Evangeline ;* Macaulay's *Essay on Lord Clive ;* Webster's *First Bunker-Hill Oration ;* Irving's *Alhambra ;* Scott's *Old Mortality ;* George Eliot's *Silas Marner ;* Hawthorne's *House of the Seven Gables.*

In 1892: Shakspeare's *Julius Caesar* and *As You Like it ;* Scott's *Marmion ;* Longfellow's *Courtship of Miles Standish ;* Addison's *Sir Roger de Coverley Papers ;* Macaulay's *Second Essay. on the Earl of Chatham ;* Webster's *First Bunker-Hill Oration ;* Irving's *Alhambra ;* Scott's *Talisman ;* George Eliot's *Scenes from Clerical Life ;* Hawthorne's *House of the Seven Gables.*

In 1893: Shakspeare's *Julius Caesar* and *Twelfth Night ;* Scott's *Marmion ;* Longfellow's *Courtship of Miles Standish ;* Addison's *Sir Roger de Coverley Papers ;* Macaulay's *Second Essay on the Earl of Chatham ;* Emerson's *American Scholar ;* Irving's *Sketch Book ;* Scott's *Ivanhoe ;* Dickens's *David Copperfield.*

II. Course in Letters and Science.

The requirements for admission are the same as in the Course in Arts, with the omission of Greek and extempore Latin translation.

III. Course in Science.

Candidates for the Course in Science are examined in Mathematics and in English, as for the Course in Arts, with the addition of Algebra from Progressions to the Theory of Equations, Solid Geometry, and Plane Trigonometry, and Trench's *Study of Words* (Supplée's edition); also in Johnston's or Scudder's History of the United States, and in six books of Caesar's Gallic War (or three books of Caesar and three books of Virgil's Aeneid), together with Latin Grammar and the elements of Latin Composition.

IV. Course in Letters.

The requirements for admission are the same as in the Course in Arts, with the omission of Greek.

Copies of papers used at the Examinations in 1889 are printed at the end of this Catalogue.

EXAMINATIONS FOR ADMISSION.

Two Examinations for Admission are held at the College in each year: the first at the end of June, in Commencement Week; and the second in September, immediately before the beginning of Christmas Term.

In 1890 the order of examinations will be as follows:

JUNE.	SEPTEMBER.
Monday, June 23d, 2 P. M., Greek.	Tuesday, September 16th, 8½ A. M., Greek; 2 P. M., Algebra.
Tuesday, June 24th, 8½ A. M., Algebra; 2 P. M., Latin.	Wednesday, September 17th, 8½ A. M., Latin; 2 P. M., Arithmetic and Geometry.
Wednesday, June 25th, 8½ A. M., Arithmetic and Geometry; 2 P. M., English.	Thursday, September 18th, 8½ A. M., English.

NOTE.— Candidates for the Course in Science will be examined in Solid Geometry and Plane Trigonometry at the hour appointed for Greek, and in the History of the United States in connection with the examination in Latin.

Candidates are required to present themselves at the hours specified for the beginning of the examinations.

Examinations for admission will also be held on the specified days of June in New York, Philadelphia, Pittsburgh, Chicago, and San Francisco, and in other places, due notice of which will be given.

No candidate can be admitted to the College before he has completed his fifteenth year.

Candidates are allowed to divide the examinations and to pass a portion of the requirements a year before they propose to enter, except that no candidate is examined in advance on the whole of the requirements in any department. Applicants for admission to any of the higher classes must sustain, besides the examination for admission to the College, a further examination on the studies already pursued by the class which they propose to enter.

All candidates for admission must bring testimonials of good moral character; and those who are from other Colleges must produce certificates of dismissal in good standing. These testimonials and certificates should be presented at the time of the examinations.

Candidates for admission to the Freshman Class, presenting certificates from certain schools which have courses of instruction approved by the Faculty, are admitted without examination on the studies covered by the certificates.

SCHEMES OF STUDY IN THE FOUR COURSES.

The following schedules show the studies of the several terms and the number of hours a week assigned to each department of instruction.

The first recitation on Monday morning throughout the College course is devoted to religious studies. These comprise the following subjects: The New Testament in Greek; Old and New Testament History and Biblical Literature; Natural Theology; the Foundations of Religious Belief; the Evidences of Christianity; the Historical Coincidences and Evidences of the Holy Scriptures.

In addition to the religious studies, the Freshmen and the Sophomores are assigned fifteen hours of attendance upon prescribed studies in each week. The Juniors and the Seniors, with some exceptions in the scientific courses, are assigned fewer hours of attendance upon prescribed studies, and are required to choose electives in order to complete at least the number of fifteen hours in each week. In computing this number, each hour of work in the Chemical or Physical Laboratory, or in the Observatory, is to be reckoned as a half-hour. The arrangement of the hours of attendance necessarily places limits to the choice of electives; but within these limits the students may choose from the elective studies of any term such as they desire, subject to the approval of the Faculty. Students are required to signify their choice of electives for any term before the close of the preceding term.

It will be observed that one-fourth of the work in the last two years of the Course in Arts is in elective studies; in the other courses the ratio of elective to prescribed work is different in different terms. In the Course in Science two-fifths of the work of Trinity term in Senior year is elective; and the students thus have the opportunity of pursuing more advanced scientific studies in two departments which they may elect.

Students are allowed to pass from one course to another at the beginning of any term, provided they have satisfied all their former examinations.

I. COURSE IN ARTS.

FOR THE DEGREE OF BACHELOR OF ARTS.

FRESHMAN YEAR.

CHRISTMAS TERM.

Greek (5 hours a week). Xenophon: Hellenica. History.

Latin (5 hours). Cicero: De Senectute and Somnium Scipionis. Livy: selections. Latin Composition.

Mathematics (5 hours). Algebra: Undetermined Coefficients, Series, Binomial Theorem, Logarithms, Theory of Equations. Geometry of Space.

TRINITY TERM.

English (2 hours). Study of Words (Trench). History of the English Language (Lounsbury).

Greek (4 hours). Homer: Odyssey; four books. Herodotus. Greek Composition. History. History of Literature.

Latin (4 hours). Catullus. Horace: Satires and Odes. Pliny: Epistles (extempore translation). Latin Composition.

Mathematics (5 hours). Plane and Spherical Trigonometry. Surveying, with field-practice. Navigation.

SOPHOMORE YEAR.

CHRISTMAS TERM.

English (2 hours). Genung's Rhetoric. Ten Lectures on Argumentative Discourse. Themes.

French (3 hours). Grammar, to the Irregular Verb (Keetels). Les Prosateurs français (Roche), begun.

Greek (4 hours). Euripides: Medea. Greek Composition. History. History of the Drama.

Latin (4 hours). Tacitus: Germania and Agricola. History of the Roman Constitution.

Mathematics (2 hours). Analytic Geometry. Lectures on the Transcendental and Higher Curves.

TRINITY TERM.

English (2 hours). Genung's Rhetoric, finished. Minto's Manual. Eight Lectures on Narrative Discourse. Analysis of Prose Style. Themes and Oral Discussions.

French (3 hours). Grammar, finished. Les Prosateurs français, continued. Lectures on the Language and its Literature.

Greek (3 hours). Sophocles: Antigone. Plato: Apology. Greek Composition. History. History of Literature.

Latin (3 hours). Selections from Latin Poets: Tibullus, Propertius, Ovid, Lucan, Lucretius (with extempore translation). Virgil: Eclogues. History of Roman Literature.

Physics (4 hours). Analytical Mechanics (Dana). Experimental Lectures on the Physics of Solids, Liquids, and Gases, and on Sound and Light (Ganot).

JUNIOR YEAR.

CHRISTMAS TERM.

Chemistry (3 hours). Lectures on general Chemistry (Remsen's Introduction; Stoddard's Outlines).

English (1 hour). History of the English Language (Craik). Essays on literary subjects. Lectures on English Poetry.

German (4 hours). Grammar, through the Irregular Verb (Cook's Otto), with selected Ballads. Bilderbuch ohne Bilder (Andersen).

Physics (3 hours). Experimental Lectures on Heat and on Electricity and Magnetism (Ganot).

ELECTIVE STUDIES.

Biology (1 hour). Microscopic work, with actual dissections of invertebrata and the frog. Lectures on general Biology (Sedgwick and Wilson's Biology).

Greek (2 hours). Aristophanes: Clouds. Anacreon (at sight).

History (2 hours). Typical Periods of English History. [In 1890, History of the United States.]

Latin (2 hours). Tacitus: selections from the Annals and the Histories. History of the early Empire. [Alternately with Senior elective.]

Mathematics (4 hours). Elements of Differential and Integral Calculus.

Natural History (2 hours). Zoology and Botany. [After 1890, this elective will continue through the year.]

TRINITY TERM.

Astronomy (3 hours). Mathematical and Descriptive Astronomy. Lectures.

Chemistry and Geology (2 hours). Lectures on general Chemistry. Dana's Text-book of Geology. [In 1890, Physics will take the place of Chemistry.]

English (1 hour). History of English Literature (Shaw). Essays and Orations. Lectures on Representative Authors and on American Literature.

COURSE IN ARTS.

German (3 hours). Grammar, finished. Reader of German Literature (Rosenstengel): Lyric poems and Ballads. Wilhelm Tell (Schiller). Lectures on the Language and its Literature.

Political Science (2 hours). Elements of Political Economy.

ELECTIVE STUDIES.

Chemistry (2 hours). Lectures on the Metals and on the Carbon Compounds. [Omitted after 1890.]

Chemistry (2 hours). Laboratory work.

English (2 hours). Lanier on the English Novel. Taine's English Literature.

Ethics (2 hours). Haven's Moral Philosophy.

French (2 hours). Tableaux de la Révolution française (Crane and Brun, editors). Reading at sight.

Greek (2 hours). Plato: Phaedo. Theocritus. Greek Composition.

History (2 hours). History of the United States.

Latin (2 hours). Horace: Epistles. Lucretius. Early Latin. Quintilian (at sight). [Alternately with Senior elective.]

Mathematics (2 hours). Differential and Integral Calculus.

Physics (2 hours). Laboratory work: Physical measurements.

SENIOR YEAR.

CHRISTMAS TERM.

English (1 hour). Philosophy of Literature (Bascom). Six Lectures on Forms of Verse. Essays and Orations.

History (5 hours). History of Modern Europe. Lectures on the History of Mediæval Europe.

Metaphysics (5 hours). Hamilton's Metaphysics (Bowen). Cousin (Henry). Logic.

ELECTIVE STUDIES.

Chemistry (2 hours). Chemical Philosophy.

Chemistry (2 hours). Laboratory work.

English (2 hours). Critical reading of Shakspeare: Hamlet, King Lear (Rolfe). Lectures on Shakspearian Criticism.

Ethics (4 hours). Whewell's Elements of Morality. Plutarch on the Divine Justice. Lectures.

German (2 hours). Modern Comedy and Romance: Einer muss heirathen (Wilhelmi); Die Ausgestossenen (Hartmann). Prose selections. Reading at sight.

Greek (2 hours). Aristophanes: Clouds. Anacreon (at sight).

COURSE IN ARTS.

Latin (2 hours). Cicero or Seneca : Philosophical writings. [Alternately with Junior elective.]

Physics (2 hours). Lectures on Advanced Physics. [For this elective a knowledge of the Calculus is required.]

Physics (2 hours). Laboratory work : Physical measurements.

Political Science (2 hours). Political Economy. Discussion of Economic Problems.

TRINITY TERM.

English (1 hour). Philosophy of Literature (Bascom), finished. Lectures and Orations.

Ethics (3 hours). Butler's Analogy. Lectures. Butler's Sermons on Human Nature.

Metaphysics (3 hours). Psychology, Human and Comparative (Wilson). Logic (Jevons, Wilson).

Political Science (4 hours). History of the English Constitution. History of the Constitution of the United States. American Local Institutions. Lectures on Modern European Constitutions.

ELECTIVE STUDIES.

Astronomy (2 hours). Selections from Chauvenet's Spherical and Practical Astronomy. Exercises in Computation. Practice in the adjustment and use of the Transit Instrument and Equatorial Telescope, etc.

* *Chemistry* (2 hours). Laboratory work.

English (2 hours). Shakspeare, his Mind and Art (Dowden). Mulford's The Nation.

Ethics (2 hours). Whewell's History of Moral Philosophy.

French (2 hours). Selections from the Modern Drama. Les Poëtes français (Roche). French Prosody (De Banville). Reading at sight.

Greek (2 hours). Plato: Phaedo. Theocritus. Greek Composition.

History (2 hours) Philosophy of History (Guizot or Schlegel).

Latin (2 hours). Persius and Juvenal : Satires. Early Latin. Quintilian (at sight). [Alternately with Junior elective.]

Metaphysics (2 hours). Intuitions of the Mind (McCosh).

Mineralogy (1 hour). Determinative Mineralogy.

* *Physics* (2 hours). Laboratory work : Physical measurements.

---

* Open to those students only[who have already elected one term's work.

II. COURSE IN LETTERS AND SCIENCE.

FOR THE DEGREE OF BACHELOR OF SCIENCE.

FRESHMAN YEAR.

CHRISTMAS TERM.

French (3 hours a week). Grammar, to the Irregular Verb (Keetels). Les Prosateurs français (Roche), begun.

History (2 hours). Outlines of English History. [In 1890, History of the United States.]

Latin (5 hours). Cicero: De Senectute and Somnium Scipionis. Livy: selections. Latin Composition.

Mathematics (5 hours). Algebra: Undetermined Coefficients, Series, Binomial Theorem, Logarithms, Theory of Equations. Geometry of Space.

TRINITY TERM.

[Sixteen hours required.]

English (2 hours). Study of Words (Trench). History of the English Language (Lounsbury).

French (3 hours). Grammar, finished. Les Prosateurs français, continued. Lectures on the Language and its Literature.

History (2 hours). History of the United States (Eliot).

Latin (4 hours). Catullus. Horace: Satires and Odes. Pliny: Epistles (extempore translation). Latin Composition.

Mathematics (5 hours). Plane and Spherical Trigonometry. Surveying, with field-practice. Navigation.

SOPHOMORE YEAR.

CHRISTMAS TERM.

[Thirteen hours required.]

Biology (1 hour). Microscopic work, with actual dissections of invertebrata and the frog. Lectures on general Biology (Sedgwick and Wilson's Biology).

English (2 hours). Genung's Rhetoric. Ten Lectures on Argumentative Discourse. Themes.

German (4 hours). Grammar, through the Irregular Verb (Cook's Otto), with selected Ballads. Bilderbuch ohne Bilder (Andersen).

Latin (4 hours). Tacitus: Germania and Agricola. History of the Roman Constitution.

Mathematics (2 hours). Analytic Geometry. Lectures on the Transcendental and Higher Curves.

COURSE IN LETTERS AND SCIENCE.

[Fourteen hours required.]

English (2 hours). Genung's Rhetoric, finished. Minto's Manual. Eight Lectures on Narrative Discourse. Analysis of Prose Style. Themes and Oral Discussions.

French (2 hours). Tableaux de la Révolution française (Crane and Brun, editors). Reading at sight.

German (3 hours). Grammar, finished. Reader of German Literature (Rosenstengel): Lyric poems and Ballads. Wilhelm Tell (Schiller). Lectures on the Language and its Literature.

Latin (3 hours). Selections from Latin Poets: Tibullus, Propertius, Ovid, Lucan, Lucretius (with extempore translation). Virgil: Eclogues. History of Roman Literature.

Physics (4 hours). Analytical Mechanics (Dana). Experimental Lectures on the Physics of Solids, Liquids, and Gases, and on Sound and Light (Ganot).

JUNIOR YEAR.

CHRISTMAS TERM.

Chemistry (3 hours). Lectures on general Chemistry (Remsen's Introduction; Stoddard's Outlines).

English (1 hour). History of the English Language (Craik). Essays on literary subjects. Lectures on English Poetry.

Mathematics (4 hours). Elements of Differential and Integral Calculus.

Natural History (2 hours). Zoology and Botany. [After 1890, this study will be continued through the year.]

Physics (3 hours). Experimental Lectures on Heat and on Electricity and Magnetism (Ganot).

ELECTIVE STUDIES

English (2 hours). Critical reading of Shakspeare: Hamlet, King Lear (Rolfe). Lectures on Shakspearian Criticism.

Ethics (4 hours). Whewell's Elements of Morality. Plutarch on the Divine Justice. Lectures.

German (2 hours). Modern Comedy and Romance: Einer muss heirathen (Wilhelmi); Die Ausgestossenen (Hartmann). Prose Selections. Reading at sight.

History (2 hours). Outlines of English History.

Latin (2 hours.) Tacitus: Selections from the Annals and the Histories. History of the Early Empire. [Alternately with Senior elective.]

COURSE IN LETTERS AND SCIENCE.

TRINITY TERM.

Astronomy (3 hours). Mathematical and Descriptive Astronomy. Lectures.

Chemistry (2 hours). Lectures on the Metals and on the Carbon Compounds. [Omitted after 1890.]

Chemistry and Geology (2 hours). Lectures on general Chemistry. Dana's Text-book of Geology. [In 1890, Physics will take the place of Chemistry.]

Chemistry (2 hours). Laboratory work.

Physics (2 hours). Laboratory work: Physical measurements.

Political Science (2 hours). Elements of Political Economy.

ELECTIVE STUDIES.

Ethics (2 hours). Marcus Aurelius. Lectures.

French (2 hours). Selections from the Modern Drama. Les Poëtes français (Roche). French Prosody (De Banville). Reading at sight.

Mathematics (2 hours) Differential and Integral Calculus.

SENIOR YEAR.

CHRISTMAS TERM.

Chemistry (2 hours). Chemical Philosophy.

Chemistry (2 hours). Laboratory work.

History (2 hours). Lectures on the History of Mediæval Europe.

Metaphysics (5 hours). Hamilton's Metaphysics (Bowen). Cousin (Henry). Logic.

Physics (2 hours). Lectures on Advanced Physics.

Physics (2 hours). Laboratory work: Physical measurements.

ELECTIVE STUDY.

History (3 hours). History of Modern Europe.

TRINITY TERM.

English (1 hour). Philosophy of Literature (Bascom). Lectures and Orations.

Ethics (3 hours). Butler's Analogy. Lectures. Butler's Sermons on Human Nature.

Metaphysics (3 hours). Psychology, Human and Comparative (Wilson). Logic (Jevons, Wilson).

Political Science (4 hours). History of the English Constitution. History of the Constitution of the United States. American Local Institutions. Lectures on Modern European Constitutions.

3

COURSE IN LETTERS AND SCIENCE.

ELECTIVE STUDIES.

Astronomy (2 hours). Selections from Chauvenet's Spherical and Practical Astronomy. Exercises in Computation. Practice in the adjustment and use of the Transit Instrument and Equatorial Telescope, etc.

Chemistry (2 hours). Laboratory work.

English (2 hours). Shakspeare, his Mind and Art (Dowden). Mulford's The Nation. [An elective in English can also be taken with the Juniors in the Course in Arts.]

Ethics (2 hours). Adam Smith's Moral Sentiments.

History (2 hours). Philosophy of History (Guizot or Schlegel).

Latin (2 hours). Persius and Juvenal: Satires. Early Latin. Quintilian (at sight). [Alternately with Junior elective.]

Metaphysics (2 hours). Intuitions of the Mind (McCosh).

Mineralogy (1 hour). Determinative Mineralogy.

Physics (2 hours). Laboratory work: Physical measurements.

III. COURSE IN SCIENCE.

FOR THE DEGREE OF BACHELOR OF SCIENCE.

SOPHOMORE YEAR.

CHRISTMAS TERM.

[Fourteen hours required.]

Biology (1 hour a week). Microscopic work, with actual dissections of invertebrata and the frog. Lectures on general Biology (Sedgwick and Wilson's Biology).

English (2 hours). Genung's Rhetoric. Ten Lectures on Argumentative Discourse. Themes.

French (3 hours). Grammar, to the Irregular Verb (Keetels). Les Prosateurs français (Roche), begun.

German (4 hours). Grammar, through the Irregular Verb (Cook's Otto), with selected Ballads. Bilderbuch ohne Bilder (Andersen).

Mathematics (4 hours). Spherical Trigonometry. Surveying, with field-practice. Navigation. Analytic Geometry. Lectures on the Transcendental and Higher Curves.

TRINITY TERM.

[Fourteen hours required.]

English (2 hours). Genung's Rhetoric, finished. Minto's Manual. Eight Lectures on Narrative Discourse. Analysis of Prose Style. Themes and Oral Discussions.

French (3 hours). Grammar, finished. Les Prosateurs français, continued. Lectures on the Language and its Literature.

German (3 hours). Grammar, finished. Reader of German Literature (Rosenstengel): Lyric poems and Ballads. Wilhelm Tell (Schiller). Lectures on the Language and its Literature.

History (2 hours). History of the United States.

Physics (4 hours). Analytical Mechanics (Dana). Experimental Lectures on the Physics of Solids, Liquids, and Gases, and on Sound and Light (Ganot).

JUNIOR YEAR.

CHRISTMAS TERM.

Chemistry (3 hours). Lectures on general Chemistry (Remsen's Introduction; Stoddard's Outlines).

English (1 hour). History of the English Language (Craik). Essays on literary subjects. Lectures on English Poetry.

German (2 hours). Modern Comedy and Romance: Einer muss heirathen (Wilhelmi); Die Ausgestossenen (Hartmann). Prose Selections. Reading at sight.

COURSE IN SCIENCE.

Mathematics (4 hours). Elements of Differential and Integral Calculus.

Natural History (2 hours). Zoology and Botany. [After 1890 this study will continue throughout the year.]

Physics (3 hours). Experimental Lectures on Heat and on Electricity and Magnetism (Ganot).

TRINITY TERM.

[Sixteen hours required.]

Astronomy (3 hours) Mathematical and Descriptive Astronomy. Lectures.

Chemistry (2 hours). Lectures on the Metals and on the Carbon Compounds. [Omitted after 1890.]

Chemistry and Geology (2 hours). Lectures on general Chemistry. Dana's Text-book of Geology. [In 1890, Physics will take the place of Chemistry.]

Chemistry (2 hours). Laboratory work.

English (1 hour). History of English Literature (Shaw). Essays and Orations. Lectures on Representative Authors and on American Literature.

Physics (2 hours). Laboratory work: Physical measurements.

Political Science (2 hours). Elements of Political Economy.

ELECTIVE STUDIES.

French (2 hours). Tableaux de la Révolution française (Crane and Brun, editors). Reading at sight.

Mathematics (2 hours). Differential and Integral Calculus.

SENIOR YEAR.

CHRISTMAS TERM.

Astronomy (2 hours). Lectures and Observatory work.

Chemistry (2 hours). Chemical Philosophy.

Chemistry (2 hours). Laboratory work

Metaphysics (5 hours) Hamilton's Metaphysics (Bowen). Cousin (Henry). Logic.

Physics (2 hours). Lectures on Advanced Physics.

Physics (2 hours). Laboratory work: Physical measurements.

ELECTIVE STUDIES.

History (2 hours). Lectures on the History of Mediæval Europe.

History (3 hours). History of Modern Europe.

TRINITY TERM.

English (1 hour). Philosophy of Literature (Bascom). Lectures and Orations.

COURSE IN SCIENCE.

Metaphysics (3 hours). Psychology, Human and Comparative (Wilson). Logic (Jevons, Wilson).

Mineralogy (1 hour). Determinative Mineralogy.

Political Science (4 hours). History of the English Constitution. History of the Constitution of the United States. American Local Institutions. Lectures on Modern European Constitutions.

ELECTIVE STUDIES.

Astronomy (2 hours). Selections from Chauvenet's Spherical and Practical Astronomy. Exercises in Computation. Practice in the adjustment and use of the Transit Instrument and Equatorial Telescope, etc.

Chemistry (3 hours). Laboratory work.

English (2 hours). Shakespeare, his Mind and Art (Dowden). Mulford's The Nation.

Ethics (3 hours). Butler's Analogy. Lectures. Butler's Sermons on Human Nature.

French (2 hours). Selections from the Modern Drama. Les Poëtes français (Roche). French Prosody (De Banville). Reading at sight. [An elective in French can also be taken with the Juniors in the Course in Arts.]

History (2 hours). Philosophy of History (Guizot or Schlegel).

Metaphysics (2 hours). Intuitions of the Mind (McCosh).

Physics (3 hours). Laboratory work: Physical measurements.

IV. COURSE IN LETTERS.

FRESHMAN YEAR.

CHRISTMAS TERM.

French (3 hours a week). Grammar, to the Irregular Verb (Keetels). Les Prosateurs français (Roche), begun.

History (2 hours). Outlines of English History. [In 1890, History of the United States.]

Latin (5 hours). Cicero: De Senectute and Somnium Scipionis. Livy: selections. Latin Composition.

Mathematics (5 hours). Algebra: Undetermined Coefficients, Series, Binomial Theorem, Logarithms, Theory of Equations. Geometry of Space.

TRINITY TERM
[Sixteen hours required.]

English (2 hours). Study of Words (Trench). History of the English Language (Lounsbury).

French (3 hours). Grammar, finished. Les Prosateurs français, continued. Lectures on the Language and its Literature.

History (2 hours). History of the United States.

Latin (4 hours). Catullus. Horace: Satires and Odes. Pliny: Epistles (extempore translation). Latin Composition.

Mathematics (5 hours). Plane and Spherical Trigonometry. Surveying, with field-practice. Navigation.

SOPHOMORE YEAR.

CHRISTMAS TERM.
[Thirteen hours required.]

Biology (1 hour). Microscopic work, with actual dissections of invertebrata and the frog. Lectures on general Biology (Sedgwick and Wilson's Biology).

English (2 hours). Genung's Rhetoric. Ten Lectures on Argumentative Discourse. Themes.

German (4 hours). Grammar, through the Irregular Verb (Cook's Otto), with selected Ballads. Bilderbuch ohne Bilder (Andersen).

Latin (4 hours). Tacitus: Germania and Agricola. History of the Roman Constitution.

Mathematics (2 hours). Analytic Geometry. Lectures on the Transcendental and Higher Curves.

COURSE IN LETTERS.

TRINITY TERM.

[Fourteen hours required.]

English (2 hours). Genung's Rhetoric, finished. Minto's Manual. Eight Lectures on Narrative Discourse. Analysis of Prose Style. Themes and Oral Discussions.

French (2 hours). Tableaux de la Révolution française (Crane and Brun, editors). Reading at sight.

German (3 hours). Grammar, finished. Reader of German Literature (Rosenstengel): Lyric poems and Ballads. Wilhelm Tell (Schiller). Lectures on the Language and its Literature.

Latin (3 hours). Selections from Latin Poets: Tibullus, Propertius, Ovid, Lucan, Lucretius (with extempore translation). Virgil: Eclogues. History of Roman Literature.

Physics (4 hours). Analytical Mechanics (Dana). Experimental Lectures on the Physics of Solids, Liquids, and Gases, and on Sound and Light (Ganot).

JUNIOR YEAR.

CHRISTMAS TERM.

Chemistry (3 hours). Lectures on general Chemistry (Remsen's Introduction; Stoddard's Outlines).

English (1 hour). History of the English Language (Craik). Essays on literary subjects. Lectures on English Poetry.

English (2 hours). Critical reading of Shakespeare: Hamlet, King Lear (Rolfe). Lectures on Shakspearian Criticism.

German (2 hours). Modern Comedy and Romance: Einer muss heirathen (Wilhelmi); Die Ausgestossenen (Hartmann). Prose Selections. Reading at sight.

Physics (3 hours). Experimental Lectures on Heat and on Electricity and Magnetism (Ganot).

ELECTIVE STUDIES.

Latin (2 hours). Tacitus: Selections from the Annals and the Histories. History of the early Empire. [Alternately with Senior elective.]

Mathematics (4 hours). Elements of Differential and Integral Calculus.

Natural History (2 hours). Zoology and Botany. [After 1890, this elective will continue through the year.]

TRINITY TERM.

[Fourteen hours required.]

Astronomy (3 hours). Mathematical and Descriptive Astronomy. Lectures.

Chemistry and Geology (2 hours). Lectures on general Chemistry. Dana's Text-book of Geology.

COURSE IN LETTERS.

English (1 hour). History of English Literature (Shaw). Essays and Orations. Lectures on Representative Authors and on American Literature.

French (2 hours). Selections from the Modern Drama. Les Poëtes français (Roche). French Prosody (De Banville). Reading at sight.

Political Science (2 hours). Elements of Political Economy.

ELECTIVE STUDIES.

English (2 hours). Lanier on the English Novel. Taine's English Literature.

Ethics (2 hours). Marcus Aurelius. Lectures.

History (2 hours). History of the United States.

Latin (2 hours). Horace: Epistles. Lucretius. Early Latin. Quintilian (at sight). [Alternately with Senior elective.]

SENIOR YEAR.

CHRISTMAS TERM.

English (1 hour). Philosophy of Literature (Bascom). Six Lectures on Forms of Verse. Essays and Orations.

History (5 hours). History of Modern Europe. Lectures on the History of Mediæval Europe.

Metaphysics (5 hours). Hamilton's Metaphysics (Bowen). Cousin (Henry). Logic.

ELECTIVE STUDIES.

Ethics (4 hours). Whewell's Elements of Morality. Plutarch on the Divine Justice. Lectures.

Latin (2 hours). Cicero or Seneca: Philosophical Writings. [Alternately with Junior elective.]

Physics (2 hours). Lectures on Advanced Physics. [For this elective a knowledge of the Calculus is required.]

Political Science (2 hours). Political Economy. Discussion of Economic Problems.

TRINITY TERM.

English (1 hour). Philosophy of Literature (Bascom), finished. Lectures and Orations.

Ethics (3 hours). Butler's Analogy. Lectures. Butler's Sermons on Human Nature.

Metaphysics (3 hours). Psychology, Human and Comparative (Wilson). Logic (Jevons, Wilson).

Political Science (4 hours). History of the English Constitution. History of the Constitution of the United States. American Local Institutions. Lectures on Modern European Constitutions.

COURSE IN LETTERS.

Astronomy (2 hours). Selections from Chauvenet's Spherical and Practical Astronomy. Exercises in Computation. Practice in the adjustment and use of the Transit Instrument and Equatorial Telescope, etc.

English (2 hours). Shakspeare, his Mind and Art (Dowden). Mulford's The Nation.

Ethics (2 hours). Adam Smith's Moral Science.

History (2 hours). Philosophy of History (Guizot or Schlegel).

Latin (2 hours). Persius and Juvenal: Satires. Early Latin. Quintilian (at sight). [Alternately with Junior elective.]

Metaphysics (2 hours). Intuitions of the Mind (McCosh).

LECTURES.

Besides the lectures given by the Professors in the several departments, the following courses of lectures are delivered each year:

By Bishop Williams: to the Seniors, on Ancient History and the History of the Holy Roman Empire; to the Juniors, on the History of England and of the United States.

By Dr. Wainwright: to the Seniors, on Anatomy and Physiology.

By Mr. Hamersley: to the Seniors, on the Constitution of the United States.

By Dr. Scudder: to the Freshmen, on Hygiene.

By Dr. Warner: on English Literature.

VOLUNTARY STUDIES.

In addition to the regular courses of instruction, arrangements are made for the following courses of special study. The names of undergraduates pursuing voluntary studies in any term are publicly announced at the end of the term.

Greek.
> SENIORS AND JUNIORS: Aristotle.
> SOPHOMORES: Xenophon's Hellenica.
> FRESHMEN: Homer.

History and Political Science.
> SENIORS: History of the Origins of Modern Europe.
> SENIORS: History of Socialism.
> JUNIORS: History of the Renaissance.

Latin.
> SENIORS AND JUNIORS: Patristic Latin; Quintilian.
> SOPHOMORES: Platus; Suetonius; Martial.
> FRESHMEN: Cicero de Amicitia; Terence.

Mathematics.
> SENIORS AND JUNIORS: Differential and Integral Calculus.
> SOPHOMORES: Analytic Geometry; Quaternions.
> FRESHMEN: Higher Algebra; Geometrical Exercises.

Metaphysics.
> SENIORS: Berkeley's Principles of Knowledge (Krauth); McCosh on the Divine Government; Porter's Human Intellect; History of Philosophy.

Modern Languages.
> SOPHOMORES: French; Reading at sight and Conversation.
> JUNIORS: German; Reading at sight and Conversation.
> SENIORS AND JUNIORS: Italian: Grandgent's Grammar; Thouar's Letture Graduali (III).
>> Spanish: Knapp's Grammar; Libro de lectura, No. 3 (Mantilla).

Oriental Languages.
> SENIORS AND JUNIORS: Elementary Hebrew Grammar and parts of the Pentateuch.

RELIGIOUS SERVICES.

The hours of daily Prayers in the College Chapel are 8:30 o'clock A. M. and 5:45 P. M. The students are required to attend one service a day, but must be present four times a week at the morning service.

On Sundays, the services are at 10:30 A. M. (with Sermon) and at 5 P. M. The students attend both Morning and Evening Prayer in the Chapel, unless excused to attend their own places of worship in the city. The Holy Communion is administered every Sunday at a voluntary service at 8:10 o'clock, except on the first Sunday of the month, when the celebration is after Morning Prayer.

TERMS AND VACATIONS.

The academic year is divided into Christmas term and Trinity term. Christmas Term begins about the middle of September, and closes near Christmas. It is followed by the Christmas vacation of two or three weeks.

Trinity term begins in January, at the end of the Christmas vacation, and extends to Commencement-day, which is the last Thursday in June. In this term there is a recess of ten days in the spring. The Sixty-fourth Commencement falls on the 26th day of June, 1890.

MATRICULATION.

Matriculation consists in signing, in the presence of the President and Professors, the following promise:

" I promise to observe the Statutes of Trinity College; to discharge faithfully all scholastic duties imposed upon me; and to maintain and defend all the rights, privileges, and immunities of the College, according to my station and degree in the same."

No student is admitted to Matriculation until all his examinations for admission are passed; and none but matriculated students, or such as are qualified for matriculation, are allowed to compete for prizes or to have their standing published as members of their class.

The time for Matriculation is determined by the Faculty.

EXAMINATIONS.

Examinations are held at the close of each term upon all the studies of that term. These examinations are partly oral and partly written.

No student is admitted to examination in any department unless his average mark for the term in that department is at least five on a scale of ten.

When a student is excluded from examination, or fails to pass any examination, he is conditioned, and is required to report himself at the opening of the following term, prepared to pass a special examination.

No student is advanced to the studies of any year until he has passed the examinations of the preceding year.

HONORS.

If a student attains in any department throughout a College year an average of nine on a scale of ten in the marks for his recitations, and also an average of nine in the marks for his examinations, it is publicly announced that he has the honor-grade in that department for the year. In case, however, he pursues the studies of a department in any year for one term only, he may obtain the honor-grade for that term on the same conditions.

Honors at graduation are conferred in the following branches of study: Astronomy, Chemistry, English, Ethics and Metaphysics, Greek, History and Political Science, Latin, Mathematics, Modern Languages, Natural Science, Physics. In order to be graduated *cum honore* in any of these branches, a student must have attained the honor-grade in all the studies of that branch throughout his College course, including the electives; except that in Greek and Latin the elective studies of one year only are required; but if the elective in either of these departments is taken for more than a year, the honor-grade must be maintained.

A list of students attaining the honor-grade in any College year is published in the Catalogue of the following year. The names of the members of each graduating class are printed in the next annual Catalogue in the following order: first, the names of those who have been graduated *cum honore*, with a statement of the branches of study in which they have attained honors; then, the names of the others alphabetically.

A student attaining the honor-grade in all his studies throughout the College course is graduated with the title of OPTIMUS.

STANDING AND APPOINTMENTS.

The standing of a student is reckoned from the beginning of Freshman year, and is determined by his scholarship, as shown in recitations and examinations.

At the close of each term a report of the scholarship, attendance, and conduct of each student is transmitted to his parent or guardian.

The aggregate standing attained by each member of a class is published at the end of Junior year and at the end of Senior year. When a student has entered College after the beginning of Freshman year and before the beginning of the second term of Sophomore year, his standing for the term or terms during which he was absent is considered to have the same ratio to the maximum as that which he gains while in residence up to the time of the first publication of his aggregate standing, and, having been once published, is not recomputed. The standing of a student

entering later in the course is computed in the same manner, with a deduction of five per cent.

Each student, the sum of whose marks for the entire course is to the maximum attainable in the ratio of at least seven and three-fourths to ten, receives an appointment for Commencement; and the names of students receiving appointments are printed on the programme in the order of their standing, followed by the names of the rest of the class in alphabetical order.

The first three appointments to speak at Commencement are given according to the aggregate of marks in the entire College course. Not less than two nor more than four other speakers are selected, after competition before a special committee of the Faculty; those members of the class being eligible who, besides receiving appointments for Commencement, have attained a mark of seven and three-fourths on the Theme-writing of the course and a mark of nine on the Graduating Oration.

No appointment is ordinarily assigned to any student who has entered College at or after the beginning of the Senior year.

LIBRARY.

The Library is open on Saturdays from 10 A. M. to 1 P. M., and on the other week-days from 2 to 5 P. M.; and the students are allowed free access to the shelves. It contains over 30,000 volumes, besides 2,500 duplicates and 20,000 unbound pamphlets. During the last academic year there were added to the library by purchase 438 volumes, by exchange 45 volumes, and by gift, not counting duplicates, 696 volumes; the net increase of the Library for the year was 1,179 volumes.

The funds for the increase of the Library are as follows:

The Burgess Fund, founded in 1843 by a gift of $500 from the Rev. George Burgess, of Hartford, afterwards Bishop of Maine.

The Elton Fund, founded in 1854 by a gift of $5,000 from John P. Elton, Esq., of Waterbury.

The Sheffield Fund, founded in 1856 by a gift of $5,000 from Joseph E. Sheffield, Esq., of New Haven.

The Peters Fund, founded in 1858 by a legacy of $2,000 from the Hon. John S. Peters, LL.D., of Hebron.

The Alumni Fund, founded in 1859 by subscriptions from the Alumni, and now amounting to about $3,300.

The Athenæum Fund, founded in 1870 by a gift of $300 from the Athenæum Literary Society at the time of its dissolution.

The Northam Fund, founded in 1887 by a legacy of $12,000 from Charles H. Northam, Esq., of Hartford.

The College Reading-Room, temporarily placed in the old gymnasium, is supplied with newspapers and periodicals published in this country and in England.

The Watkinson Library, a valuable collection of books for reference, containing more than 40,000 volumes, is also accessible to the students.

CABINET.

The College possesses valuable collections in Natural History, Geology, and Mineralogy, which are displayed in a hall specially arranged for that purpose. Since the beginning of the present year, the new cases in the gallery have been filled with specimens for examination and study.

Instruction in Geology is aided by a complete suite of Ward's casts of celebrated fossils, and by a series of carefully selected actual fossils, representing characteristic forms in each geological period from the earliest Silurian to the Tertiary. Students are also referred to a suite of typical rocks of the State of New York, a series of rocks arranged both lithologically and stratigraphically, and a number of geological and relief maps.

Instruction in Natural History is aided by a valuable collection of mounted skeletons of modern animals, by Blaschka's glass models of invertebrates, and by a collection of specimens in alcohol.

The cabinet is open every week-day from 2:30 to 4 P. M.

OBSERVATORY.

The Observatory, erected on the College Campus in 1883, is furnished with sufficient apparatus for elementary astronomical work. The transit instrument and the telescope. which is a six-inch Fitz refractor equatorially mounted and fitted with a driving-clock, were presented by Dr. and Miss St. John of Hartford, from the estate of

their father, the late Professor St. John of New Canaan, Conn., and in his memory. The sidereal clock is of the best modern manufacture. There are also in the observatory a smaller refractor and a portable transit.

LABORATORIES.

The Laboratories are in the Jarvis Hall of Science, recently erected on the south campus, of which the first floor is devoted to the department of Physics, and the second to that of Chemistry. In the basement there are a battery-room, an engine-room and workshop (to be used in connection with work in the physical laboratory), and also an assay laboratory. On the floor devoted to Physics there are, besides the lecture-room, a general laboratory and several rooms for special work in optics and electricity. The physical laboratory is to be equipped with a dynamo and engine, and the rooms have been arranged with special reference to making the facilities for practical work in electricity as complete as possible. On the second floor are the chemical lecture-room and laboratory, together with such other rooms as are necessary for a working laboratory. The equipment is such as is required for good work in qualitative and quantitative analysis.

EXPENSES.

The amount of the Treasurer's bills each year is as follows :

Tuition, -	-	-	-	-	-	$100.00
Room-rent for each person,	- from $100.00 to	35.00
Incidentals,	-	-	-	-	-	30.00
Rent,	-	-	-	-	-	12.50
Total,	-	-	- from $242.50 to	$177.50

Board can be obtained at $3.50 a week and upward; the charge in the College dining-hall is $4.50 a week, making the cost for thirty-seven weeks $166.50. To this must be added laundry-charges, together with the expense of books, furniture, clothing, travel, and society-fees, which varies according to the taste and habits of the student, and of which no estimate can be given.

For the use of the Chemical Laboratory a fixed charge is made of $8.00 for Christmas Term and of $12.00 for Trinity Term;

and students are further required to pay for breakages, to cover which charge a deposit of $5.00 must be made with the Treasurer of the College. For the use of the Physical Laboratory a fixed charge is made of $3.00 for Christmas Term and $5.00 for Trinity Term; and students are further charged for all apparatus broken or injured while in their care.

SCHOLARSHIPS.

The amount of the Treasurer's bills can be considerably reduced to holders of scholarships. The income of these scholarships, which are of different values, is placed to the credit of students of limited means, and serves to meet the charges for tuition and room-rent in whole or in part. A list of the scholarships is given at page 63 of this Catalogue. Other funds are sometimes placed at the disposal of the President for the assistance of students in special emergencies.

For holders of those scholarships which remit the entire charges for tuition and room-rent, the Treasurer's bills are reduced to $42.50; and the necessary expenses of such students, including board and other personal items, will not exceed $250 or $300 a year.

Application for any scholarship should be made in writing to the President by the parent or guardian, at or before the beginning of the term in which the student intends to enter.

Students can be provided to some extent with text-books by means of a free lending library established for that purpose, which is under the charge of the Professor of Greek. This library has been endowed with $500 from the legacy of the late Rev. J. G. Jacocks of the Class of 1847.

ROOMS.

Most of the rooms in the College buildings are so arranged as to provide that two students rooming together have a common study and separate bedrooms. All the rooms are heated by steam, and ventilation is secured by open fire-places. Water is carried to every floor in each section.

All students are required to reside in the College buildings

4

unless they have special permission from the President to room elsewhere.

The College bills are due at the beginning of each term, and must be settled at the Treasurer's office, No. 39 Pearl Street, immediately on the arrival of the student ; if not so paid, an additional charge of five per cent. is made for each term's delay. All checks and drafts should be made payable to the order of Charles E. Graves, Treasurer.

By vote of the Trustees, the Treasurer, with the approval of the President, is authorized to exclude from recitations students who neglect to pay their College bills when due.

Students admitted to advanced classes, except those from other Colleges, are required to pay $12 for each term of their advancement. This charge is sometimes remitted.

No student can receive his degree or an honorable dismissal until the Treasurer certifies that all his College bills are paid, and that, so far as the Treasurer knows, there are no lawful claims against him for board, washing, or other necessary expenses.

GYMNASIUM.

The new Gymnasium and the field of the Athletic Association provide all the students with opportunities for physical exercise. The Gymnasium is supplied with the best modern apparatus, in the use of which the students are trained by a special instructor; and its advantages are offered to the students free of charge, in consequence of a partial endowment of $10,000, the gift of Mr. Robert H. Coleman of the Class of 1877. The athletic field has been newly graded and put in order during the present year.

PRIZES.

TUTTLE PRIZE.

The Tuttle Prize of thirty dollars was founded in 1859 by the late Miles A. Tuttle, Esq., of Hartford. It will be awarded to that member of the Senior Class who shall write the best essay on "*The Athenian Democracy.*" The essays must be submitted to the President on or before the 2d of May, 1890. No award will be made except for distinguished merit.

TUTTLE PRIZE ESSAYISTS SINCE 1874.

1875. "The Norman Element in English Civilization." Edward William Worth-ington.

1876. "The Prevalence of Periodicity in the Material World." [Not awarded.]

1877. "The Roman Empire as Foreshadowed in Prophecy." John Henry King Burgwin.

1878. "The Philosophy of Waste in Nature." [Not awarded.]

1879. "The Causes and the Results of the Crimean War." [Not awarded.]

1880. "The Doctrine of Evolution, as tested by the Principles of the Inductive Philosophy." [Not awarded.]

1881. "The Development of Civil Liberty in the Anglo-Saxon Race." Alfred Poole Grint.

1882. "The Roman Tribunate." [Not awarded.]

1883. "The Respective Provinces of Thought and Imagination." Edward Stevens Beach.

1884. "The Future of Astronomy." Charles McLean Andrews.

1885. "The Relation of the People to the Land." [Not awarded.]

1886. "The Connection of Philosophy with the French Revolution." Hermann Lilienthal.

1887. "The Influence of Italian Literature on the Elizabethan Drama." [Not awarded.]

1888. "The Influence of Mechanical Inventions upon Industrial Conditions." Louis Le Grand Benedict.

1889. "The Philosophy of Spinoza." Prosser Hall Frye.

CHEMICAL PRIZES.

Established in 1858.

A Prize of thirty dollars will be awarded to that member of the Junior Class who shall write the best thesis on "*Potable Water*"; and a second prize of twenty dollars will be awarded to that member of the class who shall write the second-best thesis on

the same subject. The theses must be submitted to the Professor of Chemistry on or before the 30th of April, 1890.

The subject of the Chemical Prize thesis in 1891 will be " *Cane Sugar.*"

CHEMICAL PRIZE ESSAYISTS SINCE 1874.

1875. " The Steam Engine." WASHINGTON BRYAN.
    Second Prize : GEORGE WILLIAM LINCOLN.
1876. " Iron." EDWARD NEVINS BURKE.
    Second Prize : WILLIAM WHARTON GILLETTE.
1877. " Potassium and its Compounds." STEPHEN GERMAIN HEWITT.
    Second Prize : EDWARD MANSFIELD SCUDDER.
1878. " Combustion." HORACE BROWN SCOTT.
    Second Prize : GEORGE SUMNER CHIPMAN.
1879. " Sulphur." SYDNEY GEORGE FISHER.
    Second Prize : ALFRED HARDING.
1880. " The Atomic Constitution of Matter." ROBERT BARCLAY.
    Second Prize : WILLIAM RIDGLEY LEAKEN.
1881. "Explosives." GEORGE SUMNER HUNTINGTON.
    Second Prize : FRANK EBENEZER MILLER.
1882. " Electrolysis." WILLIAM WALTER WEBB.
    Second Prize : CHARLES ERLING HOTCHKISS.
1883. " Bleaching Agents." WILLIAM SEYMOUR SHORT.
    Second Prize : ROBERT THEODORE REINEMAN.
1884. " Ozone." HARWOOD HUNTINGTON.
    Second Prize : WILLIAM STANLEY BARROWS.
1885. " The Chemical Effects of Light." FREDERICK HUBBARD WOLCOTT.
    Second Prize : GEORGE EMERSON BEERS.
1886. "Common Salt." FREDERICK FITZ GERALD.
    Second Prize : FRANCIS BANKS WHITCOME.
1887. " Fluorine." CHARLES EDWARD PURDY.
    Second Prize : LOUIS LE GRAND BENEDICT.
1888. " Aluminium." ANDREW ELLICOTT DOUGLASS.
    Second Prize : PROSSER HALL FRYE.
1889. " Disinfectants and Germicides." JOHN WILLIAMS.
    Second Prize : GILBERT PAYSON COLEMAN.

PRIZE VERSION DECLAMATIONS.

A PRIZE, first offered in 1863, will be awarded on the following conditions :

There must be six competitors; two from the Senior Class, two from the Juniors, and two from the Sophomores. The two members of each class whose rank is highest in the studies of the preceding year in the department of English will be appointed competitors. Passages from Latin authors, distributed by lot, and then translated into English and submitted to the Professor of Latin and the Professor of English, will be pronounced in public on the 22d of May, 1890, in the presence of a committee of award

on the delivery. The merits of the version as a translation and as an English composition, together with the merits of the delivery as a declamation, will have equal weight in determining the award of the prize.

The prize-man of the year, if he be still a member of the College, will receive an appointment to pronounce an original version at the Prize Declamations of the following year, without being a candidate for the prize.

PRIZE-MEN SINCE 1874.

1875.	George Milton Hubbard.	1882.	John Henry McCrackan.
1876.	George Sumner Chipman.	1883.	Hiram Benjamin Loomis.
1877.	{ Charles Carroll Edmunds, Jr.	1884.	Frank Wood Richardson.
	{ Edward Mansfield Scudder.	1885.	William Denison McCrackan.
1878.	John Dows Hills.	1886.	Louis LeGrand Benedict.
1879.	Alfred Harding.	1887.	Willard Scudder.
1880.	Harry Campbell Black.	1888.	Reuel Crompton Tuttle.
1881.	Charles Waring Jones.	1889.	Francis Goodwin Williams.

ORATORICAL PRIZES.

THE STUDENTS, in continuation of prizes first offered in 1870 by the Athenæum and Parthenon Literary Societies, offer two Medals as prizes for excellence in writing and pronouncing English Orations. Two members of each of the three upper classes, selected after competition, will deliver their orations in public on the 22d of February, 1890, in the presence of a committee of award. A gold medal will be awarded as the first prize, and a silver medal as the second prize.

PRIZE-MEN SINCE 1874.

	Gold Medal.	*Silver Medal.*
1875.	Charles Davies Scudder.	John Huske.
1876.	Beverley Ellison Warner.	James Dowdell Stanley.
1877.	William Viall Chapin.	Edward Mansfield Scudder.
1878.	David Law Fleming.	Robert Lefavour Winkley.
1879.	David Buchanan Willson.	Melville Knox Bailey.
1880.	Thomas Morduit Nelson George.	Harry Campbell Black.
1881.	Edward Stevens Beach.	Alfred Poole Grint.
1882.	Richard Eugene Burton.	Frank Wood Richardson.
1883.	[Not awarded.]	[Not awarded.]
1884.	Charles McLean Andrews.	Edward Sims Van Zile.
1885.	William Denison McCrackan.	William Agur Beardsley.
1886.	Louis LeGrand Benedict.	Henry Reading Heydecker.
1887.	George Safford Waters.	Godfrey Malbone Brinley.
1888.	Frederick Ferdinand Kramer.	Edward McPherson McCook.
1889.	Lucian Waterman Rogers.	Theodore Payne Thurston.

ENGLISH LITERATURE PRIZE.

A Prize of sixty-five dollars, the gift of Dr. Charles D. Scudder and Edward M. Scudder, Esq., of New York City, is offered to the Senior Class for the best examination in English Literature from the earliest times to the present day, with special reference, for the Class of 1890, to *Dramatic Literature before Shakspeare.* There must be at least five competitors. The examination, which will be held on the 29th of April, 1890, will be in writing, and the questions proposed will not be confined to any text-book. The Professor of English, the Professor of Latin, and a third person, not a member of the Faculty, to be selected by them, will be a committee to hold the examination and award the prize.

The special subjects of examination for the following classes will be:

For the Class of 1891, *The Poetry of the Seventeenth Century.*
For the Class of 1892, *The Life and Writings of Keats.*
For the Class of 1893, *The Lyric Writings of Tennyson.*
For the Class of 1894, *The Dramatic Writings of Browning.*

SPECIAL SUBJECTS.	PRIZE-MEN.
1878. *The Writings of the Fourteenth Century.*	George Sumner Chipman.
1879. *The Era of the Reformation.*	[Not awarded.]
1880. *The Poetry of the Elizabethan Era.*	William Logan Crosby.
1881. *The Prose of the Reign of Queen Anne.*	William Stanley Emery.
1882. *The Poetry of the Nineteenth Century.*	William Walter Webb.
1883. *The Theological Writings of the Seventeenth Century.*	[Not awarded.]
1884. *The Poetry of the Eighteenth Century.*	Edward Sims Van Zile.
1885. *The Historical and Philosophical Writings of the Eighteenth Century.*	[Not awarded.]
1886. *The Historical Writings of the Nineteenth Century.*	[Not awarded.]
1887. *American Political Writings.*	[Not awarded.]
1888. *American Poetry.*	[Not awarded.]
1889. *American Historical Writings.*	[Not awarded.]

LATIN PRIZE.

A Prize of twenty-five dollars, first offered in 1870, will be awarded to that member of the Sophomore Class who shall sustain the best examination in Cruttwell's *History of Roman Literature.* The examination will be held on the 3d of May, 1890.

PRIZE-MEN SINCE 1874.

Juniors.

1875. Henry Groves Cameron.
1876. Charles Carroll Edmunds, Jr.
1877. George Sumner Chipman.
1878. Lorin Webster.
1879. Bern Budd Gallaudet.
1880. Charles Wright Freeland.
1881. Charles Anderson Hamilton.
1882. [Not awarded.]

1883. Henry Ritchie Neely.
1884. Robert Thorne.
1885. Paul Birdsall.

Sophomores.

1885. Francis Banks Whitcome.
1886. John William Roy Crawford.
1887. Francis Goodwin Williams.
1888. Robert Hamilton Hutchins.
1889. Harry Howard.

MATHEMATICAL PRIZE.

A Prize of twenty dollars, first offered in 1871, will be awarded to that member of the Freshman Class who shall sustain the best examination in the *Theory of Algebraic Equations.* The examination will be held on the 10th of May, 1890.

PRIZE-MEN SINCE 1874.

Algebra Prize.	*Geometry Prize.*
1875. John William Williams.	John William Williams.
1876. Walter Calvin Hagar.	Joseph Mosgrove Truby.
1877. Bern Budd Gallaudet.	Thomas Morduit Nelson George.
1878. Richard Allyn White.	Charles Wright Freeland.
1879. Arthur Beach Linsley.	William Walter Webb.
1880. Clarence Morgan Kurtz.	Clarence Morgan Kurtz.
1881. George Dudley Buck.	William Stanley Barrows.
1882. Hiram Benjamin Loomis.	Hiram Benjamin Loomis.
1883. Hermann Lilienthal.	George Emerson Beers.
1884.	George Washington Rodgers.
1885.	Henry Marvin Belden.
1886.	Andrew Ellicott Douglass.
1887.	[Not awarded.]
1888. Frank Marshall Barber.	
1889. [Not awarded.]	

GOODWIN GREEK PRIZES.

Two Prizes, one of thirty-five dollars and one of twenty-five dollars, founded in 1884 by Mrs. James Goodwin of Hartford, are offered to the Freshman Class for the best examination upon Books xix.–xxii. of Homer's *Iliad.* The examination will be held in May, and no prize will be awarded unless the work offered is excellent.

PRIZE-MEN.

First Prize.		*Second Prize.*
1885.	Henry Barnard Brownell.	John William Roy Crawford.
1886.	[Not awarded.]	[Not awarded.]
1887.	Gilbert Payson Coleman.	Robert Hamilton Hutchins.
1888.	Harry Howard.	Arthur Collins Graves.
1889.	[Not awarded.]	Ernest Randall.

ENGLISH COMPOSITION PRIZES.

Two Prizes, one of fifteen dollars and one of ten dollars, will be awarded to the members of the Sophomore Class who shall present the best essays on any of the following subjects. The essays must be handed to the Professor on or before the 16th of April, 1890.

SUBJECTS FOR 1890.

"*The Death of Arthur, as treated by Mallory and by Tennyson.*"
"*The Compromise Measures of 1850, and the Repeal of the Missouri Compromise.*"
"*The Fallacy in the Political Maxim, ' To the Victors belong the Spoils.'*"

PRIZE-MEN.

First Prize.		*Second Prize.*
1887.	Edward Taylor Sullivan.	Willard Scudder.
1888.	John Williams.	John Stockton Littell.
1889.	David Van Schaack, William George Wright.	Arthur Leslie Green, Harry Howard, Charles Herbert Young.

HONOR-MEN FOR THE YEAR 1888-89.

HONORS IN THE CLASS OF 1889.

Valedictory, ...	WILLARD SCUDDER.
Salutatory, ...	JOSEPH WILLIAM FELL.
Third Appointment, . . .	FRANCIS GOODWIN WILLIAMS.

OTHER SPEAKERS AT COMMENCEMENT.

Charles Hazzard Remington,   Reuel Crompton Tuttle.

TUTTLE PRIZE ESSAY,	Prosser Hall Frye.
CHEMICAL PRIZE ESSAY,	John Williams.
Second Prize,	Gilbert Payson Coleman.
PRIZE VERSION DECLAMATION,	Francis Goodwin Williams.
ORATORICAL PRIZES:	
Gold Medal,	Lucian Waterman Rogers.
Silver Medal,	Theodore Payne Thurston.
LATIN PRIZE,	Harry Howard.
MATHEMATICAL PRIZE,	[Not awarded.]
GOODWIN GREEK PRIZES:	
First Prize,	[Not awarded.]
Second Prize,	Ernest Randall.
HISTORICAL PRIZE,	Joseph William Fell.
ENGLISH COMPOSITION PRIZES:	
First Prizes,	David Van Schaack,
	William George Wright.
Second Prizes,	Arthur Leslie Green,
	Harry Howard,
	Charles Herbert Young.

HONOR–GRADE.

The students whose names follow attained the honor-grade in the several departments (see page 44) during the year 1888–89.

SENIORS.

In †Astronomy:	F. H. Beers, J. W. Fell, P. H. Frye, E. N. Scott.
In English:	†P. H. Frye, A. Millard, C. H. Remington, W. Scudder, E. T. Sullivan, R. C. Tuttle, F. G. Williams.
In †Ethics:	A. E. Douglass, S. F. Jarvis, Jr., A. Millard, R. H. Schütz, W. Scudder, L. F. Sennett, E. T. Sullivan, R. C. Tuttle, A. M. Vanderpoel, F. G. Williams.
In *Geology:	A. Chase, A. E. Douglass, W. Scudder.
In History and Political Science:	J. W. Fell, W. Scudder.
In Logic and Metaphysics:	F. H. Beers, P. H. Frye, W. Scudder, F. G. Williams.
In *Mineralogy:	J. W. Fell.
In *Physics:	F. H. Beers, J. W. Fell.
In †*Astronomy*:	A. E. Douglass.
In †*Chemistry*:	F. H. Beers, J. W. Fell.
In *English*:	†P. H. Frye, W. Scudder, E. T. Sullivan, R. C. Tuttle, F. G. Williams.
In †*French*:	F. H. Beers, G. A. French, P. H. Frye, A. Millard, R. H. Schütz, L. F. Sennett (two courses), E. T. Sullivan.
In *German*:	G. A. French, W. Scudder, L. F. Sennett.
In *Greek*:	F. F. Kramer, A. Millard, E. T. Sullivan, F. G. Williams.
In †*History*:	J. W. Fell, W. Scudder.
In †*Latin*:	F. G. Williams.
In *Mineralogy*:	A. Chase.
In *Physics*:	†F. H. Beers, A. E. Douglass, †J. W. Fell, †P. H. Frye, †A. M. Vanderpoel.

JUNIORS.

In †Astronomy:	C. S. Griswold, R. M. Luther, W. H. C. Pynchon, U. H. Spencer.
In *Biology:	W. E. A. Bulkeley.
In Chemistry:	G. P. Coleman, C. S. Griswold, R. M. Luther, *W. H. C. Pynchon, *J. Williams.
In English:	A. T. Gesner, C. S. Griswold, J. S. Littell, *J. B. McCook, U. H. Spencer, J. Williams.
In German:	C. S. Griswold, E. M. McCook, U. H. Spencer.

In Physics: C. S. Griswold, R. M. Luther, W. H. C. Pynchon, U. H. Spencer.

In †Political Science: C. S. Griswold, J. B. McCook, U. H. Spencer, J. Williams.

In *Anthropology :* E. M. McCook.

In *Biology:* T. L. Cheritree, G. P. Coleman, R. H. Hutchins, G. W. Miner.

In †*Chemistry :* R. H. Hutchins.

In †*English :* A. T. Gesner, J. S. Littell, W. Pressey, J. Williams.

In *Ethics:* * W. E. A. Bulkeley, † C. S. Griswold, † J. S. Littell, * R. M. Luther, † G. T. Warren, † J. Williams.

In †*French :* J. B. McCook, W. Pressey, U. H. Spencer.

In *German :* J. B. McCook.

In *Greek:* * G. P. Coleman, * C. S. Griswold, * R. H. Hutchins, W. H. C. Pynchon, * J. Williams.

In *Latin :* W. H. C. Pynchon, J. Williams.

In †*Physics :* R. H. Hutchins.

SOPHOMORES.

In *Anthropology: F. M. Barber.

In English: J. B. Burnham, J. Mayo, Jr., M. C. Mayo, V. C. Pedersen, C. N. Shepard, E. B. Stockton, T. P. Thurston, G. H. Wright, W. G. Wright, C. H. Young.

In †Ethics: I. K. Hamilton.

In French: S. H. Alling, † F. M. Barber, H. Howard, I. W. Hughes, E. F. Lawton, J. Mayo, Jr., M. C. Mayo, V. C. Pedersen, J. F. Plumb, W. G. Wright, C. H. Young.

In German: E. F. Lawton.

In Greek: H. Howard, I. W. Hughes, J. Mayo, Jr., M. C. Mayo, V. C. Pedersen, J. F. Plumb, W. G. Wright, C. H. Young.

In Latin: S. H. Alling, F. M. Barber, H. Howard, I. W. Hughes, J. Mayo, Jr., M. C. Mayo, V. C. Pedersen, J. F. Plumb, C. N. Shepard, T. P. Thurston, W. G. Wright, C. H. Young.

In *Mathematics: F. M. Barber, J. B. Burnham, E. B. Finch, A. C. Graves, H. Howard, I. W. Hughes, J. Mayo, Jr., M. C. Mayo, J. F. Plumb, C. N. Shepard, E. B. Stockton, T. P. Thurston, W. G. Wright, C H. Young.

In †Natural Science: F. M. Barber, H. Howard, I. W. Hughes, J. Mayo,
Jr., M. C. Mayo, V. C. Pedersen, J. F. Plumb,
C. H. Young.

In †Physics: F. M. Barber, I. K. Hamilton, E. F. Lawton,
J. Mayo, Jr., M. C. Mayo, V. C. Pedersen,
J. F. Plumb, C. N. Shepard, G. H. Wright,
W. G. Wright, C. H. Young.

FRESHMEN.

In *Anthropology: I. D. Russell.
In †English: A. Crabtree, R. F. Humphries, I. D. Russell,
C. E. Taylor.
In †Ethics: I. D. Russell.
In Greek: A. Crabtree, C. E. Taylor.
In Latin: A. Crabtree, O. G. Hammond, J. Paine, C. E.
Taylor.
In Mathematics: A. Crabtree, G. Hall, O. G. Hammond, J. Paine,
C. E. Taylor.

Prescribed studies in Roman; elective studies in *Italic*.
* Christmas term only.   † Trinity term only.

DEGREES CONFERRED IN 1889.

The following Degrees, having been voted by the Corporation at their annual meeting, held on the 26th day of June, 1889, were duly conferred at the public Commencement on the following day.

BACHELOR OF ARTS, IN COURSE.

Willard Scudder, OPTIMUS,
With honors in Greek and Latin.

Andrew Ellicott Douglass,
With honors in Astronomy, Mathematics, and Physics.

George Albert French,
With honors in Modern Languages.

Lucien Frank Sennett,
With honors in Greek, Latin, and Modern Languages.

Edward Taylor Sullivan,
With honors in English.

Francis Goodwin Williams,
With honors in Latin.

Arthur Chase.

Samuel Farmar Jarvis, Jr.

Frederick Ferdinand Kramer.

Abel Millard, Jr.

Arthur Hamilton Noyes.

Charles Hazzard Remington.

Reuel Crompton Tuttle.

BACHELOR OF SCIENCE, IN COURSE.

Frederick Horace Beers,
With honors in Astronomy, Chemistry, Mathematics, and Modern Languages.

Joseph William Fell,
With honors in Astronomy, Chemistry, and Physics.

Prosser Hall Frye,
With honors in Astronomy and Mathematics.

Robert Hutchins Schütz,
With honors in Modern Languages.

Edward Norman Scott.

Aaron Melgert Vanderpoel.

MASTER OF ARTS, IN COURSE.

Of the Class of 1876 :
Charles Edward Moore, M.D.

Of the Class of 1883 :
George Pratt Ingersoll, LL.B.

Of the Class of 1885 :
The Rev. Samuel Smith Mitchell.

Of the Class of 1886 :
George Emerson Beers, LL.B.
Paul Birdsall.
James Goodwin.
Henry Reading Heydecker, M.D.
The Rev. Hermann Lilienthal.
William James Tate.
Frederick Hubbard Wolcott, M.D.

MASTER OF ARTS, HONORIS CAUSA.

The Rev. WILLIAM WHALEY BELLINGER, B.A. Union, Rector of Trinity Church, Wethersfield, Conn.

DOCTOR OF LAWS, HONORIS CAUSA.

CHARLES JEREMY HOADLY, of the Class of 1851, M.A., Librarian of the State of Connecticut.

DOCTOR IN DIVINITY, HONORIS CAUSA.

The Rt. Rev. BOYD VINCENT, M.A. Yale, Assistant Bishop of Southern Ohio.
The Rev. HALL HARRISON, M.A. College of St. James, Rector of St. John's Church, Ellicott City, Md.
The Rev. ALEXANDER MACKAY-SMITH, of the Class of 1872, Archdeacon of New York.

SCHOLARSHIPS.

TOUCEY SCHOLARSHIPS.

These were founded in 1868 by the Hon. Isaac Toucey, LL.D. They are assigned, after a competitive examination, to students who are studying with a view to the Holy Ministry. The founder, by making the College the trustee of another fund, has enabled it to appoint the holders of these Scholarships to Scholarships in the Berkeley Divinity School.

SCHOLARSHIPS OF TRINITY CHURCH, NEW YORK.

These are five in number, and were founded in 1834, in consideration of the sum of $5,000 granted by the vestry of Trinity Church, New York, toward the endowment of the Hobart Professorship. The students by whom they are held are exempt from all charges for "tuition, room-rent, fuel for recitation-rooms, or other general objects." The right of nomination is in the Rector, Wardens, and Vestry of Trinity Church, or their assigns, or any person by them authorized.

WILLIAM ALLEN MATHER SCHOLARSHIP.

This was founded in 1864, and endowed by Mrs. Jane C. Mather, of Hartford. The student by whom it is held is exempt from all charges for "tuition, room-rent, fuel for recitation-rooms, or other general objects."

SCHOLARSHIP OF ST. PAUL'S CHURCH, TROY, N. Y.

This was founded in 1830 by members of the Parish whose name it bears. It is "for the benefit of pious and indigent young men studying with a view to the Ministry in the Protestant Episcopal Church." The right of nomination is in the Rector, Wardens, and Vestry of St. Paul's Church, Troy.

HEARTT SCHOLARSHIP.

This was founded in 1830, and endowed by Philip Heartt, Esq., of Troy. It has the same object with the preceding Scholarship. The right of nomination was vested in Mr. Heartt during his lifetime, and afterward in the Bishop of the Protestant Episcopal Church in the Diocese of Connecticut; and during any vacancy in the Episcopate, it devolves on the presiding officer of the College.

THOMAS BACKUS SCHOLARSHIP.

This was founded in 1837 by the Rev. Stephen Jewett, M.A., to be held "by some beneficiary designing to enter the Ministry of the Protestant Episcopal Church." The scholarship yields no available income at present.

SCHOLARSHIP OF CHRIST CHURCH, HARTFORD.

This was founded in 1839 by J. Smyth Rogers, M.D., Professor of Chemistry. In 1845, in consideration of the subscription from the Parish for the erection of Brownell Hall, the endowment was increased. The right of nomination is vested in the Rector of Christ Church.

GREGOR SCHOLARSHIPS.

Through a bequest of $15,000, made in 1856 by Mrs. Sarah Gregor, the College is enabled to remit the fees for tuition to a certain number of necessitous students.

KIRBY SCHOLARSHIP.

This was founded in 1872, and endowed by a legacy of Miss Harriet Kirby, of Hartford. It yields $300 a year, which is to be appropriated to undergraduates studying with a view to Holy Orders. The right of nomination is vested in the Rector of St. John's Church, Hartford; or, in case he fails to nominate, in the Corporation of the College.

BURHANS SCHOLARSHIP.

This scholarship was founded by a bequest of the Rev. Daniel Burhans, D.D. The scholarship is to be held by "such candidates for Orders as shall be nominated from time to time by the Rector and Wardens of Christ Church, Hartford."

DANIEL GOODWIN SCHOLARSHIPS.

These scholarships, founded in 1881 from a bequest of Daniel Goodwin, Esq., of Hartford, are four in number, each yielding to the holder the sum of $30 a year in payment of college bills. The scholars, one in each class, are nominated from the public schools of Hartford in such manner as the Board of Education or School Visitors of the town appoint.

RIPLEY SCHOLARSHIP.

This was founded in 1887 by a bequest of $3,000 from Miss M. Louise Ripley, of Hartford. The nomination to the scholarship is in the hands of the President of the College.

LEMUEL J. CURTIS SCHOLARSHIP.

This scholarship was founded in 1888 by the legacy of Lemuel J. Curtis, Esq., of Meriden, Conn.; and the funds are held by a trustee appointed under the terms of the legacy.

PHILADELPHIA ALUMNI SCHOLARSHIP.

A scholarship is partly endowed by the Philadelphia Alumni Association, the income of which will become available when the endowment is completed.

OTHER SCHOLARSHIPS.

The following Scholarships for the remission of fees for tuition were founded in 1844 and 1845 "for the benefit of young men in indigent circumstances, communicants of the Protestant Episcopal Church."

Scovill Scholarship, founded by William H. Scovill, Esq., of Waterbury.

Scovill Scholarship, founded by J. M. L. Scovill, Esq., of Waterbury.

Elton Scholarship, founded by John P. Elton, Esq., of Waterbury.

St. John's, Waterbury, Scholarship, founded by Parishioners of St. John's Church, Waterbury.

Trinity Church, New Haven, Scholarship, founded by Parishioners of Trinity Church, New Haven.

St. Paul's, New Haven, Scholarship, founded by Parishioners of St. Paul's Church, New Haven.

Lake Scholarship, founded by Benjamin T. Lake, Esq., of Bethlehem.

Hallam Scholarship, founded by the Rev. Robert A. Hallam, D.D., of New London.

St. James's, New London, Scholarship, founded by Parishioners of St. James's Church, New London.

Shelton and Sanford Scholarship, founded by the Shelton and Sanford families, of Derby.

Morgan Scholarship, founded by the Rev. John Morgan, of Stratford.

Fowler Scholarship, founded by the Fowler family, of Northfield.

Cornell Scholarship, founded by Samuel G. Cornell, Esq., of Greenwich.

St. Paul's, Norwalk, Scholarship, founded by Parishioners of St. Paul's Church, Norwalk.

Trinity Church, Portland, Scholarship, founded by Parishioners of Trinity Church, Portland.

Sherman Scholarship, founded by the Sherman family, of Brookfield.

Burr Scholarship, founded by Mrs. Sarah Burr, of Hartford.

St. John's Church, Hartford, Scholarship, founded by Parishioners of St. John's Church, Hartford.

Five other Scholarships were endowed in the same manner, by sundry subscriptions, the nomination to which is vested in the Corporation.

SCHOLARSHIPS OF THE CHURCH SCHOLARSHIP SOCIETY.

The Church Scholarship Society of the Diocese of Connecticut aids a few students with loans, not exceeding $100 a year, which are granted only to persons in necessitous circumstances, preparing for Holy Orders and sustaining a correct deportment as communicants. Applicants must be furnished with a testimonial of such qualifications, signed by a clergyman to whom they are personally known.

SCHOLARSHIPS OF THE SOCIETY FOR THE INCREASE OF THE MINISTRY.

This Society holds the Mark Warner fund, amounting to about $10,000, the income of which, under the conditions of the gift, is to be appropriated to young men, scholars of the Society, studying at Trinity College or the Berkeley Divinity School, and also the Hemingway fund of $5,000, for the benefit of its scholars in Trinity College. The Society is able to grant other scholarships, ranging in value from $100 to $300 a year.

EXAMINATIONS FOR ADMISSION.
1889.

GREEK.

I. GRAMMAR.

Make the necessary euphonic changes in κϑ, ενϑς.

Decline throughout ϑύελλα, μάντις, the pronoun of the first person.

Decline through all the genders of the plural λελυκώς.

Give the synopsis of the aor. act. of πονέω; the pres. act. of δίδωμι.

Inflect through the persons and numbers the fut. ind. mid. of φαίνω ; the imperf. act. of τιμάω.

II. XENOPHON.

Translate (An. I. 3, 9):

Ἄνδρες στρατιῶται, τὰ μὲν δὴ Κύρου δῆλον ὅτι οὕτως ἔχει πρὸς ἡμᾶς ὥσπερ τὰ ἡμέτερα πρὸς ἐκεῖνον· οὔτε γὰρ ἡμεῖς ἐκείνου ἔτι στρατιῶται, ἐπεί γε οὐ συνεπόμεϑα αὐτῷ, οὔτε ἐκεῖνος ἔτι ἡμῖν μισϑοδότης. Ὅτι μέντοι ἀδικεῖσϑαι νομίζει ὑφ' ἡμῶν οἶδα· ὥστε καὶ μεταπεμπομένου αὐτοῦ οὐκ ἐϑέλω ἐλϑεῖν, τὸ μὲν μέγιστον αἰσχυνόμενος ὅτι σύνοιδα ἐμαυτῷ πάντα ἐψευσμένος αὐτόν· ἔπειτα δὲ καὶ δεδιὼς μὴ λαβών με δίκην ἐπιϑῇ ὧν νομίζει ὑπ' ἐμοῦ ἠδικῆσϑαι. Ἐμοὶ οὖν δοκεῖ οὐχ ὥρα εἶναι ἡμῖν καϑεύδειν οὐδ' ἀμελεῖν ἡμῶν αὐτῶν, ἀλλὰ βουλεύεσϑαι ὅ τι χρὴ ποιεῖν ἐκ τούτων.

Give the parts of ἔχει, νομίζει, ἐλϑεῖν. Explain the use of the participle in αἰσχυνόμενος, ἐψευσμένος. The rule for the mode in ἐπιϑῇ. The construction of ὧν, ἡμῶν αὐτῶν.

Translate (An. III. 4, 36):

Ἐπεὶ δὲ ἐγίγνωσκον αὐτοὺς οἱ Ἕλληνες βουλομένους ἀπιέναι καὶ διαγγελλομένους, ἐκήρυξε τοῖς Ἕλλησι συσκευάζεσϑαι ἀκουόντων τῶν πολεμίων. Καὶ χρόνον μέν τινα ἐπέσχον τῆς πορείας οἱ βάρβαροι, ἐπειδὴ δὲ ὀψὲ ἐγίγνετο, ἀπῄεσαν· οὐ γὰρ ἐδόκει λύειν αὐτοῖς νυκτὸς πορεύεσϑαι καὶ κατάγεσϑαι ἐπὶ τὸ στρατόπεδον. Ἐπειδὴ δὲ σαφῶς ἀπιόντας ἤδη ἑώρων οἱ Ἕλληνες, ἐπορεύοντο καὶ αὐτοὶ ἀναζεύξαντες, καὶ διῆλϑον ὅσον ἑξήκοντα σταδίους· καὶ γίγνεται τοσοῦτον μεταξὺ τῶν στρατευμάτων ὥστε τῇ ὑστεραίᾳ οὐκ ἐφάνησαν οἱ πολέμιοι οὐδὲ τῇ τρίτῃ.

Explain the accent of each word in the clause Καὶ . . . βάρβαροι. Where are the following forms made and from what presents : ἐπέσχον, ἀπῄεσαν, ἐφάνησαν ? Explain why χρόνον and νυκτός are not in the same case. How great is the distance spoken of in ἑξήκοντα σταδίους ?

III. HOMER.

Oral Examination.

IV. COMPOSITION.

Translate into Greek :

You would deliberate better concerning the war, if you should consider (λογίζομαι) the nature (τόπος) of the country against which you are fighting. Let us march out quickly, that he may be taken off his guard (ἀφύλακτος).

V. HISTORY.

What were the duties of the Amphictyonic Council ? Describe the position of the Helots at Sparta. What were the duties of the various Archons at Athens ? Describe the course of Themistocles touching the fortifications of Athens. Give the date of the reforms of Cleisthenes, the beginning and end of the Peloponnesian War.

LATIN.

I. CAESAR.

Translate:

Locus erat castrorum editus, et paulatim ab imo adclivis circiter passus mille. Huc magno cursu contenderunt, ut quam minimum spatii ad se colligendos armandosque Romanis daretur, exanimatique pervenerunt. Sabinus, suos hortatus, cupientibus signum dat. Impeditis hostibus propter ea quae ferebant onera, subito duabus portis eruptionem fieri iubet.

Explain the cases of *castrorum, passus, se, hostibus, duabus,* declining each word throughout. Give the comparison of *imo, magno.* Give the principal parts of *contenderunt, daretur, hortatus, fieri, iubet,* marking the quantity of the penults. Write the synopsis of *pervenerunt* in the active voice. What general rules apply to all declensions of nouns ?

[The following passage from Caesar is to be omitted except by candidates for the course in Science.]

Translate :

Loci haec erat natura, atque ita montibus angustis mare continebatur, uti ex locis superioribus in litus telum adigi posset. Hunc ad egrediendum nequaquam idoneum locum arbitratus, dum reliquae naves eo convenirent, ad horam nonam in ancoris exspectavit. Interim, legatis tribunisque militum convocatis, et quae ex Voluseno cognosset et quae fieri vellet ostendit.

Give the syntax of *continebatur, posset, convenirent, cognosset,* stating where each is made and giving the reasons for the mood and the tense. What verbs compounded with prepositions are construed with the dative? What verbs are construed with two accusatives ? What is the use of the supine ?

II. VIRGIL.

Oral Examination on Translation and on Prosody.

III. CICERO.

Translate:

Quod si omnis impetus domesticorum hostium, depulsus a vobis, se in me unum convertit, vobis erit videndum, Quirites, qua condicione posthac eos esse velitis, qui se pro salute vestra obtulerint invidiae periculisque omnibus; mihi quidem ipsi quid est quod iam ad vitae fructum possit adquiri, cum praesertim neque in honore vestro, neque in gloria virtutis, quidquam videam altius quo mihi libeat ascendere ?

Give the syntax of *convertit, velitis, obtulerint, videam,* stating where each is made and giving the reasons for the mood and the tense. Explain the construction of *vobis, invidiae.* What is the use of the gerund ? of the gerundive ? What is the construction with *antequam* ? with *postquam* ?

IV. EXTEMPORE TRANSLATION.

Translate:

Qua re per exploratores cognita, summo labore militum Caesar, continuato diem noctemque opere in flumine avertendo, huc iam rem deduxerat, ut equites, etsi difficulter et aegre fiebat, possent tamen et auderent flumen transire, pedites vero tantummodo umeris ac summo pectore exstare; et cum altitudine aquae, tum etiam rapiditate fluminis ad transeundum non impedirentur. Sed tamen eodem fere tempore pons in Ibero prope effectus nunciabatur.

Write the English words which are derived from words in the first three lines.

Translate :

Hoc pecus omne meum est; multae quoque vallibus errant,
multas silva tegit, multae stabulantur in antris;
nec, si forte roges, possim tibi dicere quot sint ;
pauperis est numerare pecus.   De laudibus harum
nil mihi credideris; praesens potes ipsa videre.
Iam modo caeruleo nitidum caput exsere ponto,
iam, Galatea, veni, nec munera despice nostra.
Certe ego me novi, liquidaeque in imagine vidi
nuper aquae ; placuitque mihi mea forma videnti.

V. LATIN COMPOSITION.

Translate :

The war being ended, the chiefs of the states came to congratulate the Roman general. They informed Caesar that the Helvetii had left their homes in order that they might make war against all Gaul and might choose for their nation a place which they judged the best in the land.

"We ask," they said, "that we may call a council of the Gauls for a certain day; and we have some things of which we wish to speak with you concerning the common safety, for you are wiser than we." He gave them permission ; and they appointed a day for the council, and promised that they would inform no one of what they had done.

VI. HISTORY AND GEOGRAPHY.

1. What was done for Rome by Q. Fabius ? by Regulus ? by Cicero? 2. Give an outline of the history of the first Punic war. 3. What was the result of the battle of Cannae ? of Actium ? Give the dates. 4. Give some account of Marius and of Jugurtha. 5. Trace the history of the reign of Nero and of the year following his death.

1. Describe the position of Latium, of Etruria, of the Sabine country. 2. Where were Cannae, Actium, Philippi, Zama ? 3. What is the course of the Tiber, the Rhenus, the Rhodanus, the Euphrates, the Araxes? 4. Where were Corinth, Ephesus, Saguntum, Delos, Massilia ? 5. Give a description of Sicily, of the province of Africa, of the Peloponnesus.

MATHEMATICS.

ARITHMETIC.

1. In what time will any sum of money treble itself by simple interest at six per cent. ?

2. Find the square root of 2.376 to three places of decimals.

3. Reduce $\dfrac{1}{2}$ of $\dfrac{3\frac{47}{64}}{2\frac{2}{23}}$ to a decimal fraction.

4. How are the metric units of capacity and of weight derived from the meter?

5. Give your estimate, in terms of the metric system, of the length and breadth of the sheet of paper upon which these questions are printed.

ALGEBRA.

1. Simplify $a - \left\{ a - (a - 4b) \right\} + \left\{ 2b - (3a - 5b) \right\} - \left\{ 2a - (-4a + 5b) \right\}$.

2. Resolve into prime factors $x^6 - y^6$ and $a^4 + a^2 + 1$.

3. Simplify $\dfrac{1}{x(x+y)} + \dfrac{2y}{x(x^2-y^2)} + \dfrac{1}{y(x-y)}$.

4. Solve $\begin{cases} 5x + 2y - z = 6. \\ 2z - x - y = 6. \\ y + z - 2x = 6. \end{cases}$

5. Solve $\dfrac{x-1}{\sqrt{x+1}} = \dfrac{\sqrt{x-1}}{2}$.

6. Solve $\dfrac{10x-7}{2x-1} + \dfrac{1-9x}{3x+1} = 2$.

7. Solve $\begin{cases} 4y - 3x = 2. \\ x^2 - 2y^2 = -14. \end{cases}$

8. Write the first four terms of the expansion of $(a-b)^{29}$.

9. The first term of an arithmetical progression is 7, the common difference is 3, and the sum of the terms is 242. Find the number of terms.

10. There are two numbers whose product is 60 times their difference, and whose sum multiplied by 5 is less by 10 than their product. What are the numbers?

11. There are three numbers in arithmetical progression, the common difference being 4. If 2 be added to the third number, the numbers form a geometrical progression. What are the numbers?

12. The sum of two numbers is 16, and the sum of their reciprocals is $\frac{1}{3}$. What are the numbers?

PLANE GEOMETRY.

Demonstrate the following propositions :

1. If from any point within a triangle two straight lines are drawn to the extremities of any side, their sum is less than that of the two remaining sides of the triangle.

2. If two circumferences intersect each other, the line joining their centres bisects at right angles the line joining the points of intersection.

3. Rectangles having equal altitudes are proportional to their bases.

4. Triangles which have an angle in each equal are to each other as the rectangles of the sides including the equal angles.

5. Two regular polygons of the same number of sides can be constructed, the one circumscribed about a circle and the other inscribed in it, which shall differ from each other by less than any given surface.

Problems :

1. To inscribe a circle in a given triangle.

2. To construct a square whose area shall be twice that of a given square.

3. To construct an angle of 15°.

SOLID GEOMETRY.

Demonstrate the following propositions:

1. If two straight lines are cut by three parallel planes, they are divided proportionally.
2. The sum of the plane angles formed by the edges of any polyedral angle is less than four right angles.
3. Any triangular prism may be divided into three equivalent triangular pyramids.
4. The sum of the angles of a spherical triangle is less than six right angles and greater than two right angles.
5. Symmetrical spherical triangles are equivalent.

PLANE TRIGONOMETRY.

[For Candidates for the Course in Science.]

1. Sin $x = \frac{5}{13}$; find the values of the other trigonometric functions of x.
2. What formulas are used for finding the angles of a plane triangle, the three sides being given ?
3. Prove that sin A $+$ sin B $= 2$ sin $\frac{1}{2}$ (A $+$ B) cos $\frac{1}{2}$ (A $-$ B).
4. Express tan x in terms of cos x.
5. The side of a regular hexagon is six feet. Find the side of a regular octagon having the same apothem.
6. Two sides of a triangle are 37 and 53, and the included angle is 43° 17′ 23″. Find the other angles and the third side.
7. Find the value of sin $x +$ cos $x-$tan $x +$ cosec x, x being 133° 27′.
8. Two sides of a triangle are 11 and 7, and the opposite angles are in the ratio of 2 to 1. Find the angles and the third side.

ENGLISH.

I. Correct, criticise, and recast the following sentences :

1. Luther's force of character was marked, nothing could make him quail before it.
2. Argument after argument he presented to the people in proof of the downright fallacy in the policy of indulgences maintained by the Pope.
3. But another series of changes accompanies those of the septa, and are entirely independent of them.
4. The absence of pelvis, or its extremely rudimentary condition in fishes, places them at the foot of the line in this respect.
5. Take him by the head, John, always, a horse.
6. Here are a hundred dollars in small bills.

II. Write an essay containing about five hundred words on one of the following subjects, giving attention to spelling, punctuation, use of capitals, division by paragraphs, and expression :

1. Shakspeare's *Julius Cæsar* ; the leading characters, or the plot.
2. Gray's *Elegy in a Country Churchyard*. Describe and classify the versification. Explain some of the allusions; as, *curfew, village Hampden*, etc.
3. Scott's *Rob Roy*. What distinguishes a Highlander from a Lowlander ?
4. Miss Austen, or her novel *Pride and Prejudice*.

III. Give the reasons for the use of the points in the first sentence of division II. of this paper.

IV. Give in full the rules for the formation of the possessive case and the plural number of English substantives. Write singular and plural possessive of the word *Jones*, and give rules for pronunciation.

HISTORY OF THE UNITED STATES.

[For Candidates for the Course in Science.]

1. When and where was the first successful English settlement within the present limits of the United States ?
2. When and by whom was the Massachusetts Bay colony settled ?
3. Name the thirteen colonies which revolted from Great Britain in 1776.
4. How long did the Revolutionary War continue ? Mention any four of the principal battles.
5. How was the country governed before 1789 ?
6. When and where did the Federal Convention meet, and what did it accomplish?
7. Mention the Presidents of the United States in their order, indicating those who had more than one term.
8. Mention the different wars in which the United States has engaged since 1789.
9. When was the Louisiana purchase made ? Mention the States and Territories which have been formed from the country then obtained.
10. What States and Territories have been formed from the country ceded by Mexico in 1848?
11. When did the Civil War begin, and how long did it last ? What were the principal battles ?
12. What questions have been decided by the Civil War ?
13. How was the disputed election of 1876 decided ?
14. Why has the United States developed in wealth and population more rapidly than any other part of the world ?