

Hauri A. Walhy



# DIOVE BIOVE



The Book Of The CLASS OF

XCVIII

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BY
THE TECHNIQUE BOARD OF NINETY-EIGHT.

of our late beloved President,
Francis Amasa Walker,
All that may be worthy in this book
is affectionately dedicated.



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THE TECHNIQUE BOARD of '98 feels that it has labored under peculiar difficulties. Aside from the blow that has fallen upon the Institute at large, the Board has suffered two severe misfortunes in the sudden death of one of its members, and in the illness and absence for a time of the Editor in Chief.

The two especial ends sought in this book have been, valuable and accurate statistics, and humor which should amuse and not offend. "A jest's prosperity," however, "lies in the ear of him that hears it, never in the tongue of him that makes it." The Editors ask, then, for a charitable construction upon this part of their work, not one line of which has been penned in other than a spirit of cordial good nature. Everything in the book is, as usual, exclusively the work of undergraduates and alumni of the Institute.

The Board is especially pleased to have been enabled to present the book in a more pleasing shape than has been possible in the past, by the addition of a leather binding.

The Editors trust that the shortcomings in their work may be extenuated by the circumstances mentioned, while the praise for any merit the volume may contain is due to the Class of '98, in whose name this TECHNIQUE is edited and published.



# 1896-97.

#### APRIL, 1896.

5. Opening of Junior Week.

- Fourth L'Avenir and Deutsche Verein lecture: "Goethe's Herman and Dorothea, Evangeline, and The Courtship of Miles Standish," by Professor Vogel.
   Annual Spring Concert of the Glee, Banjo, and Mandolin Clubs in Huntington Hall.
- S. TECHNIQUE, Volume XI., issued.

9. Junior Promenade in Pierce Hall.

Reception of the Board of Editors of "The Tech," in "The Tech" office.
 Technology Theatricals, under the management of the Walker Club, in Copley Hall.

15. Tech. Society of Philadelphia formed, at the Colonnade Hotel, Philadelphia.

Technology wins her heat in the Intercollegiate Relay Race, held at Philadelphia, under the auspices
of the University of Pennsylvania.

### MAY.

z. Exhibition of the Beaux Arts Competition Drawings, in the Architectural Building.

14. Formation of the English High School Club.

 Intercollegiate Drill, at Mechanics Hall. Technology defeats Brown in the Battalion Drill, and W. M. Corse wins the Individual Competition, between Brown, Amherst, Harvard and Technology.

20. Sophomore-Freshman Baseball Game. Won by Ninety-eight; score, 15-8.

 Annual Meeting of the N. E. Intercollegiate Press Association, as guest of "The Tech," followed by a Dinner at the Vendome.

23. N. E. I. A. A. Meet at Worcester.

27. Outdoor Class Championship Games. Championship won by the Class of Ninety-eight.

#### JUNE.

5. Alumni Reception tendered to members of the Faculty and Senior Class at Exchange Club.

- Concert given by the Glee, Banjo, and Mandolin Clubs to the Senior Class and its friends, in Huntington Hall.
- 7. Baccalaureate Sermon by the Rev. Dr. Donald, of Trinity Church, in Trinity Church.

8. Ninety-six Class Day exercises.

9. Graduating Exercises, Huntington Hall.

#### SEPTEMBER.

30. The thirty-first school year of the Institute opens with 1,200 enrolled students.

#### OCTOBER.

- 3. Y. M. C. A. Reception to the Class of Nineteen Hundred,
- 3. Annual Address to the Freshman Class, by President Walker, in Huntington Hall,
- 7. The Technology Club formally opened.
- 9. Athletic Mass Meeting, held in Huntington Hall.
- 10. The Republican Club organized.
- 24. Fall Handicap Games, on the Irvington Oval.
- 30. Republican Parade of Students.

#### NOVEMBER.

- 9. Annual Cross-Country Run. Osgood, '97, won; time, 28 min. 56% sec.
- Annual Sophomore-Freshman Cane Rush and Football Game, on South End Grounds. Rush resulted in a tie between Ninety-nine and Nineteen Hundred; score, 19-19. Game won by Ninety-nine; score, 6-0.

#### DECEMBER.

- Annual Indoor Class Championship Games, in the Gymnasium. Championship won by the Class of Ninety-eight.
- 19. L'Avenir Theatricals, in Huntington Hall.
- 23. Arbitration Committee selected to decide whether the Freshmen could carry canes.
- 25. Annual Alumni Dinner, at the Exchange Club.
- 30. Annual Winter Concert of Glee, Banjo, and Mandolin Clubs, in Huntington Hall.

## JANUARY, 1897.

- 5. Death of President Francis Amasa Walker.
  - Student Mass Meeting held to make arrangements for the funeral,
- Funeral of President Francis Amasa Walker, from Trinity Church.
   All meetings, dinners, meets, etc. were suspended by the student body for thirty days.

#### FEBRUARY.

26. Election of the Ninety-nine Technique Electoral Committee,

#### MARCH.

- Dinner of the Senior Class, Young's Hotel. Toastmaster, Harry W. Allen.
   Dinner of the Junior Class, Exchange Club. Toastmaster, Herbert I. Lord.
- 14. Annual Open Scratch Games of M. I. T. A. C., in the Gymnasium.
- 19. Dinner of the Sophomore Class, Hotel Brunswick, Toastmaster, Arthur L. Hamilton.
- Dinner of the Freshman Class, at Young's Hotel. Toastmaster, Clifford M. Leonard. Completion of the election of the Board of Editors of TECHNIQUE, '99.

#### APRIL.

- 9. Athletic Mass Meeting held in Huntington Hall,
- 19. Opening of Junior Week.
- TECHNIQUE, Volume XII., issued. Junior Promenade, in Pierce Hall.
- 23. Reception of the Board of Editors of "The Tech," in "The Tech" Office,
  - Technology Theatricals, under the management of the Walker Club, in the Bijou Theatre.
- 24. Annual Spring Concert of the Glee, Mandolin, and Banjo Clubs in Association Hall.



# President. Francis A. Walker.\*

Secretary.
Francis H. Williams.

JOHN D. RUNKLE. FREDERIC W. LINCOLN. WILLIAM ENDICOTT, JR. JOHN CUMMINGS. Augustus Lowell. HOWARD A. CARSON. CHARLES J. PAINE. CHARLES FAIRCHILD. DAVID R. WHITNEY. LEWIS WM. TAPPAN, JR. HENRY D. HYDE. ALEXANDER S. WHEELER. JAMES P. TOLMAN. HOWARD STOCKTON. ELIOT C. CLARKE. NATHANIEL THAYER. CHARLES F. CHOATE. HENRY L. PIERCE.\* HIRAM F. MILLS. PERCIVAL LOWELL.

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# On the part of the Commonwealth.

HIS EXCELLENCY GOV. ROGER WOLCOTT.

HON. WALBRIDGE A. FIELD, Chief Justice of the Supreme Court.

HON. FRANK A. HILL, Secretary of the Board of Education.



President.

FRANCIS A. WALKER.\*

Treasurer.

GEORGE WIGGLESWORTH.

Secretary.

HARRY W. TYLER.

Librarian.

ROBERT P. BIGELOW.

Bursar.

ALBERT M. KNIGHT.

# OFFICERS OF INSTRUCTION.

FRANCIS A. WALKER, Ph.D., LL.D., President.\*

Amherst College, A. K. E., Ø. B. K.

A.B., Amherst, '60; A.M., Amherst, '63, Yale, '73; Ph.D., Amherst, '75, Halle, '94; LL.D., Yale, '82, Amherst, '82, Harvard, '83, Columbia, '87, St. Andrews, '88, Dublin, '92, Edinburgh, '96.

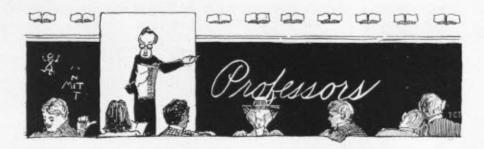


In United States military service, 1861-65; Instructor Williston Seminary, 1865-68; Editor Springfield (Mass.) Republican, 1868; Chief Bureau of Statistics, Washington, 1869; Superintendent Ninth Census, 1870-72; Commissioner of Indian Affairs, 1872; Professor of Political Economy and History, Sheffield Scientific School, 1873-81; Honorary member, Royal Statistical Society of London, 1875; Chief, Bureau of Awards, Philadelphia, 1876; Member, School Committee, New Haven, 1877-80; Member, Board of Education, Connecticut, 1877-81; Lecturer, Johns Hopkins University, 1877-70; United States Commissioner, Monetary Conference at Paris, 1878; Member, National Academy of Sciences, 1891; appointed Railroad Commissioner of Connecticut, 1879; Superintendent Tenth Census, 1879-81; President, Massachusetts Institute of Technology, since 1881; President, American Statistical Association, since 1882; Lecturer in Harvard University, 1882-84, 1895-96; Member, Massachusetts Historical Society, 1883; Member, Massachusetts Historical Society, 1883; Member, Massachusetts American Economic Association, 1885-92; Honorary member, American Economic Association, 1885-92; Honorary member, American Society of Mechanical Engineers, 1885; Semantor of the Phi Beta Kappa, since 1896; Correspondent, Central Statistical Commission of Belgium, 1888; Corresponding member, California Academy of Sciences, 1888; Officer of the French Legion of Honor, 1889; Vice President, National Academy of Sciences, 1889; President, Military Historical Society of Massachusetts, 1890-96; declined appointment as United States Commissioner to Monetary Conference at Brussels, 1892; Honorary Member, Literary and Philosophical Society of Manchester (England), 1892; Vice President, American Society for the Promotion of Profit Sharing, since 1892; Correspondent of the Institute of Society of Naval Architects and Marine Engineers, since 1892; Correspondent of the Institute of Prance, 1893; Corresponding member, British Association for the Advancement of Science, 1894; Membe

member, British Association f Public Library of Boston, 1896.

Author of the Statistical Atlas of the United States (1874); The Indian Question (1874); The Wages Question (1876); Money (1878); Money, Trade, and Industry (1870); Political Economy (1883); Liand and Its Rent (1883); History of the Second Army Corps (1886); First Lessons in Political Economy (1889); Life of Gen. W. S. Hancock (1894); The Making of the Nation (1895); International Bimetallism (1896); also, Reports on the Commerce and Navigation of the United States (1868-70); Indian Affairs (1872); and the Censuses of 1870 and 1880. Addresses on Economic, Statistical, Educational, and Military subjects. Articles in Lalor's Cyclopædia of Political Science, Encyclopædia Britannica, Johnson's Cyclopædia, the Century Magazine, Scribner's, Atlantic Monthly, Princeton Review, Harper's Magazine, Lippincott's, North American, Yale Review, Quarterly Journal of Political Science, Journal of Political Science, Quarterly Journal of Folitical Science, Porum, Quarterly Journal of Economics, Proceedings of American Economic Association, Journal of American Statistical Association, Journal of American Social Science Association, Technology Quarterly, etc. Quarterly, etc.

<sup>\*</sup> Decrased.





JOHN D. RUNKLE, PH.D., LL.D., Walker Professor of Mathematics.

B.S., A.M., Harvard University, '51; Ph.D., Hamilton College, '67; LL.D., Wesleyan University, '71.

Assistant upon the American Ephemeris and Nautical Almanac, 1849-84; Editor Mathematical Monthly, 1858-61; Professor of Mathematics, Massachusetts Institute of Technology, from 1865; Acting President, 1808-70; President, 1870-78.

Author of New Tables for Determining the Values of the Co-efficients in the Perturbative Function of Planetary Motion, the Manual Element in Education (published in Report of Massachusetts Board of Education) (1876-77), a second Paper on same subject in Report of 1880-81, Report on Industrial Education, American Institute of Education (1883), Analytic Geometry, etc.

Residence, High Street, Brookline.



George A. Osborne, S.B., Professor of Mathematics.

Harvard S. S., '60.

Assistant Professor of Mathematics, U. S. Naval Academy, 1861-65; Professor of Mathematics, Massachusetts Institute of Technology, from 1866; Secretary of Faculty, 1868-71.

Author of Examples in Differential Equations (1886); Differential and Integral Calculus (1891), etc.

Residence, 11 Beacon Street.



James M. Crafts, S.B., Professor of Organic Chemistry.

Harvard S. S., '58.

Professor of Chemistry, Cornell, 1868-70; Professor of Chemistry, Massachusetts Institute of Technology, 1870-80 (nonresident, 1874-80), 1892; Member National Academy of Sciences, 1872

Corresponding member of the British Association for the advancement of Science.

Author of a short course in Qualitative Analysis, and of a series of papers on Chemical and Physical subjects chiefly published in the Comptes Rendus of the French Academy of Sciences—many of the papers in collaboration with C. Friedel.

Residence, 59 Marlboro Street.



ROBERT H. RICHARDS, S.B., Professor of Mining Engineering and Metallurgy.

M. I. T., '68, III.

Assistant in Chemistry, Massachusetts Institute of Technology, 1868-69; Instructor in Assaving and Qualitative Analysis, 1869-70; Assistant Professor of Analytical Chemistry, 1870-71; Professor of Mineralogy and Assaving, in charge of the Mining and Metallurgical Laboratories, 1871-72; Professor of Mining Engineering, 1873-84; Secretary of the Faculty, 1878-83; Professor of Mining Engineering and Metallurgy from 1884; President of M. I. T. Alumni Association, 1873-76; President of the American Institute of Mining Engineers, 1886-87.

Residence, 32 Eliot Street, Jamaica Plain.



WILLIAM H. NILES, PH.B., A.M., Professor of Geology and Geography.

Yale S. S., '67.

PH.B., Yale S. S., '67; A.M., Wesleyan, '69.

Professor of Physical Geography, Massachusetts Institute of Technology, 1871; Professor of Geology and Geography, Massachusetts Institute of Technology from 1878; Lecturer on Geology, Wellesley College, 1882; Professor of Geology, Wellesley College, 1888; President of the Boston Society of Natural History from 1892.

Author of Agency of Glaciers in the Excavation of Valleys and Lake Basins, Zones of Physical Features of Mountams, Some Expansions, Move-ments, and Fractures of Rocks, observed at Monson, Mass., The Causes of the Recent Floods in Germany (1887), etc.

Residence, 10 Linden Street, Cambridge.



CHALRES R. CROSS, S.B., Thayer Professor of Physics and Director of the Rogers Laboratory.

M. I. T., '70, Sci. and Lit. Course.

Instructor in Physics, Massachusetts Institute of Technology, 1870-71; Assistant Professor of Physics, 1871-75; Professor of Physics from 1875; in charge of Department of Physics from 1877; in charge of Course in Electrical Engineering, since its establishment, 1882.

Author of many original scientific papers on electricity, acoustics, and other branches of physics, chiefly published in the Proceedings of the American Academy of Arts and Sciences.

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GAETANO LANZA, C.E., Professor of Theoretical and Applied Mechanics.

University of Virginia, '70.

Instructor, Massachusetts Institute of Technology, 1871-72; Assistant Professor, 1872-75; Professor of Theoretical and Applied Mechanics from

Author of Notes on Mechanical Engineering (1886), Notes on Friction (1887), Applied Mechanics (1885), and of many papers in Transactions American Society Mechanical Engineers, Proceedings Society of Arts, Proceedings British Institution of Civil Engineers, Technology Quarterly,

Residence, 22 West Cedar Street.



GEORGE F. SWAIN, S.B., M. Am. Soc. C. E., Hayward Professor of Civil Engineering.

M. I. T., '77, I.

Student in Germany, 1877-80; Expert on Tenth U. S. Census, 1880-83; Instructor in Civil Engineering, Massachusetts Institute of Technology, 1881-83; Assistant Professor of Civil Engineering, 1883-87; Associate Professor, 1857-88; Professor from 1888; Engineer of Massachusetts Rail-road Commissioners from 1887; Member Boston Transit Commission since 1894.

Author of Report on Water Power of Atlantic Slope, Notes on Hydraulics and on Theory of Structures, numerous reports on Railroad Bridges, Brake Equipment, and other subjects, in the reports of the Mussachusetts Railroad Commission, and many papers on engineering subjects, published in the Transactions of American Society Civil En-gineers, Proceedings New England Water Works Association, Technology Quarterly, Proceedings Society Arts, Journal Franklin Institute.

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FRANCIS W. CHANDLER, M. Am. Inst. Arch., Professor of Architecture.

With Messrs. Ware & Van Brunt, Architects, 1864-66; Student in Paris, 1866-68; Assistant with Professor Ware at the Massachusetts Institute of Technology, 1869; Assistant Supervising Architect at Washington, 1870-73; in partnership with Mr. E. C. Cabot, of Boston, 1873-88; Professor of Architecture, Massachusetts Institute of Technology, from 1885

Author of A Few Hints About Drainage (1888), Construction Details (1892), Notes on Limes, Cements, Mortars, and Concretes (1892), etc. Residence, 195 Marlboro Street.



ALPHONSE N. VAN DAELL, LL.D., Professor of Modern Languages.

B.A., Collège Saint Servais (Liège), '64; Рн.С., Louvain, '65; LL.D., Université de Liège, '68.

Professor of Modern Languages, Kentucky College, 1876-79; Instructor in Haverford College, and Lecturer in University of Pennsylvania, 1885-86; Director Modern Languages, Boston High and Latin Schools, 1886-1886; Professor of Modern Languages, Massachusetts Institute of Technology, from 1880.

Author of A Monograph on the Study of Modern Languages, La Parole Française (in collaboration with Dr. L. Sauveur), Das Deutsche Buch (in collaboration with J. Schrakamp), Leander's Träumereien (edited and annotated), Heine's Harzreise (edited and annotated), Memoires du Duc de Saint Simon (edited and annotated), An Introduction to the French Language, An Introduction to the French Authors, Extraits choisis de Paul Bourget, etc.

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WILLIAM T. SEDGWICK, Ph.B., Ph.D., Professor of Biology. Yale S. S., '77; Berzelius Society.

Ph.B., Yale, '77; Ph.D., Johns Hopkins, '81.

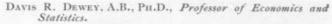
Assistant Professor of Biology, Massachusetts Institute of Technology, 1883-84; Associate Professor, 1884-91; Professor from 1891.

ogy, 1833-34, Associate Frotessor, 1834-91; Frotessor from 1891.

Author of General Biology (1886), New Edition (1895), Biological Examination of Water (1888), Sanitary Condition of the Water Supply of Lowell, Mass. (1891), The Purification of Drinking Water by Sand Filtration (1892), Modern Scientific Views of the Cause and Prevention of Asiatic Cholera (1892), numerous Reports to the State Board of Health of Massachusetts on Epidemics of Typhold Fever Caused by Infected Water, Milk, etc., several papers on Education, various articles in Wood's Reference Handbook of Medical Science, etc.

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University of Vermont, '79; Δ. Ψ.; Φ. B. K.

A.B., University of Vermont, '79; Ph.D., Johns Hopkins University, '86.

Teacher, Underhill, Vt., 1870-81; Principal Hyde Park High School, Chicago, 1881-83; Student and Fellow at Johns Hopkins University, 1883-86; Instructor, Massachusetts Institute of Technology, 1897-88; Assistant Professor, 1889-89; Assistant Professor, 1889-89; Assistant Schools from 1887; Appointed, 1894-95, Chairman of Board to Investigate the Subject of the Unemployed in Massachusetts; Member of Publication Committee of American Economic Association, 1895; appointed member of Board to investigate Charitable and Reformatory Interests and Institutions of Massachusetts, 1896.

Author of a Syllabus on Political History since 1815 (1887), Syllabus of Lectures on Economic Questions of Commerce (1892), reviews in Publications of American Statistical Associations, Suicides in New England, associated in Report on Unemployed, Graphic Statistics, etc.

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# SILAS W. HOLMAN, S.B., Professor of Physics.

M. I. T., '76, VIII.

Assistant, Massachusetts Institute of Technology, 1876-80; Instructor, 1880-82; Assistant Professor, 1882-85; Associate Professor, 1885-93; Professor from 1893.

Author of Physical Laboratory Notes (1885), The Effect of Temperature on the Viscosity of Air and Carbon Dioxide (1886), Discussion of the Precision of Measurements (1887), Friction of Leather Belts on Iron Pulleys, Standard for the Resistance of Copper (1891), and numerous other papers in Proceedings American Academy, American Journal of Science, Appalachia, Journal of Franklin Institute, Technology Quarterly, etc.

Residence, Hotel Ilkley.



# Webster Wells, S.B., Professor of Mathematics.

M. I. T., '73, I.

Instructor in Mathematics, Massachusetts Institute of Technology, 1873-80, and 1882-83; Assistant Professor of Mathematics, 1883-85; Associate Professor, 1885-93; Professor from 1893.

Author of Academic Arithmetic, Academic Algebra, Higher Algebra, University Algebra, College Algebra, Plane and Solid Geometry, Plane and Spherical Trigonometry, Logarithmic Tables, etc.

Residence, Lexington.



#### Cecil H. Peabody, S.B., Professor of Marine Engineering and Naval Architecture.

M. I. T., '77, II.

With the Western Union Railroad, 1878; Professor of Mathematics and Engineering, Imperial Agricultural College, Japan, 1878-80; Assistant Professor of Mechanical Engineering, University of Illinois, 1881-83; Instructor, Massachusetts Institute of Technology, 1883-84; Assistant Professor of Steam Engineering, 1884-89; Associate Professor, 1889-93; Professor of Marine Engineering from 1893.

Author of Notes on Governors and Fly Wheels (1885), Notes on Valve Gears (1887), Thermodynamics of the Steam Engine and other Heat Engines (1889), Tables of the Properties of Saturated Steam (1888), Valve Gears for Steam Engines (1890), Steam Boilers (1897) (with E. F. Miller), Papers to Scientific Societies, etc.

Residence, Hotel Oxford.



HARRY W. TYLER, S.B., Ph.D., Professor of Mathematics. M. I. T., '84, V.

S.B., M. I. T., '84; Ph.D., Erlangen, '89.

Assistant, Massachusetts Institute of Technology, 1884-86; Instructor, 1886-90; Assistant Professor, 1890-92; Associate Professor, 1892-93; Secretary of the Faculty, 1889-90 and from 1891; Professor of Mathematics,

Author of Entertainments in Chemistry, The Application of Determi-nant Theorems to a Particular Case, Ueber die Sylvestersche und die Bézoutsche Determinanten, Technological Education in the United

Residence, Marshall Street, Newton Centre.



ARLO BATES, LITT.D., Professor of English.

Bowdoin, '76; A. Δ. Φ.; Φ. B. K.

Editor of Broadside, 1878-70; editor of Boston Courier, 1880-93; correspondent of Providence Journal, Chicago Tribune, Book Buyer, etc., 1880-93; Professor of English, Massachusetts Institute of Technology from 1893.

Author of Patty's Perversities, The Pagans, A Wheel of Fire, Berries of the Briar, Soanets in Shadow, A Lad's Love, The Philistines, Prince Vance, Albrecht, Book o' Nine Tales, The Poet and His Self, Told in the Gate, In the Bundle of Time, The Torch Bearers, and Talks on Writing English.

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JOHN BIGELOW, JR., CAPT. UNITED STATES CAVALRY, Professor of Military Science and Tactics.

West Point, '77, 2d Lieutenant.

With Tenth Cavalry in Texas, 1877-70; Instructor in Modern Languages, West Point, 1879-94; served under Generals Crook and Miles with Tenth Cavalry against Apache Chief Geronino in Arizona, 1884-86; Adjutant General District Columbia Milita, 1887-80; with Tenth Cavalry in Arizona and Montana, 1889-94; Professor M. I. T. from 1894.

Author of the Principles of Strategy.

Residence, The Gables, Babcock Street, Brookline,



D. Despradelle, Professor of Architectural Design.

Received first promotion at the Ecole des Beaux-Arts, 1882; many of the prizes at the Ecole des Beaux-Arts and Institut de France; received diplomas from Ecole des Beaux-Arts and Societé centrale des Architects français; took part in the Concour de Rome four times, and received first Second Grand Prix in 1889, Lauriat du Salon, officier d'Académie, Assistant Inspector State Buildings and National Palaces, and under this title helped in the building of the New Ministry of Agriculture, National Library, the mansion of M. Wilson, and M. Grévy (ex-President), and various other public and private edifices.

Residence, 90 Pinckney Street.



Peter Schwamb, S.B., Professor of Mechanism and Director of the Workshops.

M. I. T., '78, II.

Graduate Student, Massachusetts Institute of Technology, 1878-79; Draughtsman, Howe Scale Co., Rutland, Vt., 1879-80; Draughtsman, Hinkley Locomotive Co., Boston, 1880-83; Instructor, Massachusetts Institute of Technology, 1883-84; Assistant Professor, 1884-88; Associate Professor, 1888-96; Professor of Mechanism, 1897.

Author of Notes on the Elements of Mechanism (1885), Notes on Gearing (1885), etc.,

Residence, 13 Water Street, Arlington.



M. I. T., '72, I.



Assistant Engineer, Providence Waterworks, 1872-73; Assistant Engineer, Providence Sewerage, 1873-75; Assistant Engineer, Newton Waterworks, 1875-76; Engineer Inspector, Boston Sewerage, 1877; Assistant Engineer, Atchison, Topeka & Santa Fé R. R., 1878-80; Assistant Engineer, Mexican Central R. R., 1880; Chief Engineer, Las Vegas Waterworks, and general engineering, 1880; Assistant Engineer, Atchison, Topeka & Santa Fé R. R., 1881-84; Secretary of the Society for the Promotion of Engineering Education from 1895; Director of Massachusetts Highway Association from 1895; Assistant Professor, Massachusetts Institute of Technology, 1887-89; Associate Professor, 1889-95; Professor from 1896.

Author of Measurement of the Angular Deflection of Beams Fixed at One End, Railroad Curves and Earthwork, Tables for Earthwork Computation, Railroad Engineering and Economics of Location, Roads and Road Building, Railroad Building with Reference to Economy in Operating, articles in Engineering Record, Railroad Gazette, Technology Quarterly, etc.

Residence, Vermont Street, West Roxbury, Mass.



ALFRED E. BURTON, S.B., Associate Professor of Topographical Engineering.

Bowdoin, '78; Δ. K. E.; Φ. B. K.

Land Surveyor, 1878-79; Topographical Draughtsman and Topographer on U. S. Coast and Geodetic Survey, 1879-82; appointed Commissioner on Massachusetts Topographical Survey, 1895; Instructor in Topographical Engineering, Massachusetts Institute of Technology, 1882-84; Assistant Professor, 1884-89; Associate Professor, 1889-96; Professor from 1896.

Residence, 60 West Newton Street.



DWIGHT PORTER, Ph.B., M. Am. Soc. C. E., Professor of Hydraulic Engineering.

Yale S. S., '80; Berzelius Society.

Special Agent, Tenth Census U. S., Report upon Water Power, 1880-83; Instructor in Mathematics, Massachusetts Institute of Technology, 1883-85; Instructor in Civil Engineering, 1885-87; Assistant Professor of Civil Engineering, 1887-90; Associate Professor of Hydraulic Engineering, (890-96; Professor, 1896.

Author of Flood Discharge from Small Watersheds, Report upon a Sanitary Inspection of Certain Tenement-House Districts of Boston, portions of Vols. XVI. and XVII., Tenth Census U. S., Reports on Water Power, Notes on Stereotomy and Warped Surfaces, etc.

Residence, 149 Hawthorne Street, Malden.



HEINRICH O. HOFMAN, E.M., MET.E., PH.D., Associate Professor of Mining and Metallurgy.

E.M., Met.E., Prussian School of Mines, Clausthal, '77; PH.D., Ohio University, '89.

Practicing Metallurgist, 1877-85; Private Assistant to Prof. R. H. Richards, and Lecturer on Metallurgy, Mussachusetts Institute of Technology, 1885-87; Professor of Metallurgy and Assaying, Dakota School of Mines, 1837-89; Assistant Professor of Mining and Metallurgy, Massachusetts Institute of Technology, 1889-91; Associate Professor of Mining ing and Metallurgy from 1891.

Author of Gold Milling in the Black Hills (1888), The Dry Assay of Tin Ores (1890), Recent Progress in the Treatment of Argentiferous Lead Ores (1893-96); Metallurgical Lead Exhibits at the Columbian Exposition (1893), Some Experiments on the Fusibility of Fire Clays (1895), Further Experiments on the Fusibility of Fire Clays (1895), The Equipment of Mining and Metallurgical Laboratories (1896), The Metallurgy of Tead and the Desiberations of Base Ralling at the Desiberations of Base Ralling at the Desiberations of Base Ralling at the Desiberation of Base Ralling Lead and the Desilverization of Base Bullion, etc.

Residence, 6 Cedar Avenue, Jamaica Plain.



THOMAS E. POPE, A.M., Associate Professor of General Chemistry.

Harvard University, '69.

Instructor in Chemistry, Massachusetts Institute of Technology, 1874-76; Professor of Chemistry, Iowa Agricultural College, 1876-84; Assistant Professor of General Chemistry, Massachusetts Institute of Technology, 1884-95; Associate Professor from 1895.

Residence, Rockland Street, Brighton.



Eleazer B. Homer, S.B., Associate Professor of Architecture. M. I. T., '85, IV.

Instructor in Architecture, Massachusetts Institute of Technology, 1887-90; Assistant Professor, 1890-95; Associate Professor from 1895.

Residence, Belmont.



GEORGE T. DIPPOLD, PH.D., Associate Professor of Modern Languages.

Boston University, '83.

Postgraduate student in Sanskrit and Germanic Philology and Instructor in German, Harvard University, 1871-74; Instructor in French, Sanskrit, and Anglo-Saxon, Boston University, 1874-83; Lecturer in German Literature, Gothic, and Middle High German, Johns Hopkins University, 1883-85; Instructor in Modern Languages, Massachusetts Institute of Technology, 1886-91; Assistant Professor, 1891-95; Associate Professor, from 1895.

Author of the Great Epics of Mediæval Germany, Translator of Emanuel Geibel's Brunhild, Deutsche Litteraturdenkmale des 18 Jahrhunderts, Theories as to the Original Home of the Indo-European Race, Richard Wagner's Ring of the Nibelung Explained, and in part Trans-lated, German Scientific Reader, etc.

Residence, Hotel Berkeley.



HENRY P. TALBOT, S.B., Ph.D., Associate Professor of Analytical Chemistry.

M. I. T., '85, V.

S.B., M. I. T., '85; Ph.D., University of Leipzig, '90.

Assistant in Analytical Chemistry, Massachusetts Institute of Technology, 1885-87; Instructor, 1887-88, and 1890-92; Assistant Professor of Analytical Chemistry, 1892-95; Associate Professor of Analytical Chemistry from 1895.

Author of Ueber das Verhalten der Tiglinsäure und Angelicasäure gegen Bromwasserstoff und Jodwasserstoff (1890), Notes on the Action of Hydrobromic and Hydroiodic Acids on Tiglic and Angelic Acids (1891), An Index to the Literature of Angelic and Tiglic Acids from 1842 to 1892, On the Properties of Hydrogen Peroxide Solutions (with H. R. Moody), A Preparatory Course of Quantitative Analysis (1897), and other chemical papers.

Residence, Balcarres Road, West Newton.



CHARLES F. A. CURRIER, A.B., A.M., Associate Professor of History.

Harvard University, '87; Φ. B. K.

A.B., Harvard University, '87; A.M., Harvard University, '88; Fellow of Harvard University studying at Berlin and Paris, 1889-91.

Instructor in History and Political Science, Massachusetts Institute of Technology, 1891-93; Assistant Professor of History, 1893-95; Associate Professor from 1895.

Author of Constitutional and Organic Laws of France, American Editor of Brockhaus's Konversations, Lexikon, Contributions to Magazines, etc.

Residence, 11 Cutter Street, East Somerville.



LINUS FAUNCE, S.B., Associate Professor of Drawing.

M. I. T., '77, II.

Draughtsman for Superintendent of Bridges, P. C. & St. L. R. R., 1878-79; Chief Clerk Car Shops, P. C. & St. L. R. R., 1879-82; in charge of Waterworks and Signals, N. Y. & N. E. R. R., 1882-84; Assistant Professor, Massachusetts Institute of Technology, 1884-96; Associate Professor from 1895; Author of Descriptive Geometry, Mechanical Drawing, etc

Residence, Bellevue Street, West Roxbury.



WILLIAM O. CROSBY, S.B., Assistant Professor of Structural and Economic Geology.

M. I. T., '76, VII.

Student Assistant in Paleontology, 1875-76; Assistant in Paleontology, 1876-78; Assistant in Geology, 1878-80; Instructor in Geology, 1880-33; Assistant Professor of Mineralogy and Lithology, 1883-92; Assistant Professor of Structural and Economic Geology from 1892.

Author of Geology of Eastern Massachusetts, Geology of the Boston Basin, Common Minerals and Rocks, Guides to Mineralogy and to Dynamical Geology and Petrography, Tables for the Determination of Common Minerals, and numerous papers on the Geology of New England, the Black Hills, Caba, Trinidad, etc.; and on Joint Structure, Faults, Origin of Continents, Colors of Soils, Concretions, Drift, Ore deposits, etc., published in Proceedings of the Boston Society of Natural History, American Journal of Science, Geological Magazine, Technology Quarterly, etc.

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JEROME SONDERICKER, S.B., C.E., Assistant Professor of Applied Mechanics.

University of Illinois, '80.

Instructor, University of Illinois, 1880-83; Assistant Professor Engineering and Mathematics, 1883-85; Instructor in Applied Mechanics, Massachusetts Institute of Technology, 1885-89; Assistant Professor of Applied Mechanics, from 1880.

Author of An Investigation as to How to Test the Strength of Cements (with G. Lanza), Experiments Relating to Theory of Beams, A Description of Some Repeated Stress Experiments, Notes on Graphic Statics, etc.

Residence, Newton.



ALLYNE L. MERRILL, S.B., M. Am. Soc. M. E., Assistant Professor of Mechanism.

M. I. T., '85, II.

Assistant, Massachusetts Institute of Technology, 1885-87; Instructor, 1887-91; Assistant Professor of Mechanism from 1891.

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Dana P. Bartlett, S.B., Assistant Professor of Mathematics. M. I. T., '86, VI.

Assistant in Mathematics, Massachusetts Institute of Technology, 1886-87; Instructor in Mathematics, 1888-91; Assistant Professor of Mathematics from 1891; Assistant in Observatory of Harvard College, 1887.

Author of General Principles of the Method of Least Squares. Residence, 486 Columbus Avenue.



EDWARD F. MILLER, S.B., M. Am. Soc. M. E., Assistant Professor of Steam Engineering.

M. I. T., '86, II.

Assistant, Massachusetts Institute of Technology, 1886-88; Instructor, 1885-92; Assistant Professor of Steam Engineering from 1892.

Author of a number of Articles printed in the Transactions American. Society of Mechanical Engineers, The Technology Quarterly, and other Engineering papers, "Steam Boilers" (with C. H. Peabody), etc.

Residence, Rockland Street, Brighton.



FRANK VOGEL, A.B., A.M., Assistant Professor of Modern Languages.

Harvard University, '87, A. U.

Professor of Modern Languages, Mitchell's Boys' School, Billerica, Massachusetts, 1887-88; Instructor in Modern Languages, Massachusetts Institute of Technology, 1888-92; Assistant Professor of Modern Languages from 1892; Post-graduate Student in Germanic Philology at Harvard University, 1888-92; Director of Modern Languages in the Normal Summer School of Languages and Science, Normal, Illinois, 1800-92; Student in Germanic and Romance Philology, Heidelberg University, 1893-94. Editor and Annotator of Chamisso's Peter Schlemihl's wundersame Geschichte.

Residence, 120 Pembroke Street, Boston.



WILLIAM L. PUFFER, S.B., Assistant Professor of Electrical Engineering.

M. I. T., '84, III.

Assistant, Massachusetts Institute of Technology, 1884-86; Instructor, 1886-93; Assistant Professor from 1893; Member of the American Institute of Electrical Engineers, 1893; Consulting Electrical Engineer of the Inspection Department of the Factory Mutual Insurance Companies, 1894; Member of Managing Committee, A. I. E. E., 1896.

Residence, West Newton.



FREDERICK H. BAILEY, A.B., A.M., Assistant Professor of Mathematics.

Harvard University, '87; Φ. B. K.

A.B., Harvard University, '87; A.M., Harvard University, '89.

Assistant in Mathematics, Harvard University, 1889-91; Instructor in Mathematics, Massachusetts Institute of Technology, 1891-93; Assistant Professor from 1893.

Author of Plane and Solid Analytic Geometry (with Professor Woods) (1897).

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FRED L. BARDWELL, S.B., Assistant Professor of General Chemistry.

University of Minnesota, '81; M. I. T., '84, V.

Assistant in General Chemistry, 1884-86; Instructor in General Chemistry, 1886-94; Assistant Professor from 1894.

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Augustus H. Gill, S.B., Ph.D., Assistant Professor of Gas Analysis.

M. I. T., '84, V.

S.B., M. I. T., '84; Ph.D., Leipzig, '90.

Assistant in General and Sanitary Chemistry, Massachusetts Institute of Technology, 1834-86; Instructor, 1857-88; Water Analyst, State Board of Health, 1888; Instructor in Gas Analysis, Massachusetts Institute of Technology, 1890-94; Assistant Professor from 1894.

Author of Beitrag zur Kenntniss des Ortho-dichlor Stilbens (1800), and various papers relating to Water and Gas Analysis in the Journal of the American Chemical Society, English Analyst, Fresenius' Zeitschrift, and Technology Quarterly, "Gas and Fuel Analysis for Engineers."

Residence, Canton.



ARTHUR A. NOYES, S.M., Ph.D., Assistant Professor of Organic Chemistry.

M. I. T., '86, V.

S.M., M. I. T., '87; Ph.D., Leipzig, '90.

Instructor, 1890-93; Assistant Professor from 1893.

Author of a Detailed Course of Qualitative Analysis, Laboratory Experiments on the Class Reactions of Organic Substances, also numerous articles in Scientific Papers.

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S. Homer Woodbridge, A.M., Assistant Professor of Heating and Ventilation.

Williams College, 73.

Student at the Massachusetts Institute of Technology, 1874, Instructor in Physics, 1883-95; Assistant Professor from 1895.

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HARRY E. CLIFFORD, S.B., Assistant Professor of Theoretical Physics.

M. I. T., '86, VI.; Θ. Ξ.

Assistant in Physics, 1886-88; Instructor in Theoretical Physics, 1888-95; Assistant Professor in Theoretical Physics from 1895.

Residence, Trinity Court, Boston.



RICHARD W. LODGE, Assistant Professor of Mining and Metallurgy.

M. I. T., '79, III.

Assistant in Mining and Metallurgical Laboratory of the Massachusetts Institute of Technology, 1870-82; Mining in Colorado, 1880-81; Superintendent of Silver Mine in Nevada, 1881-82; Assistant in Mining and Metallurgical Laboratory of the Massachusetts Institute of Technology, 1882-83; Head Chemist for North Chicago Rolling Mill Company, South Chicago, Ill., 1883-85; Chemist for Sloss Iron and Steel Company, Alabama, 1887; Instructor in Mining and Metallurgical Laboratory of the Massachusetts Institute of Technology, 1889-94; Assistant Professor from 1895.

Residence, 1423 Washington Street, Boston.



Frederick S. Woods, A.B., A.M., Ph.D., Assistant Professor of Mathematics.

Wesleyan University, Ψ. Υ., Φ. B. K.

A.B., Wesleyan, '85; A.M., Wesleyan, '88; Ph.D., Göttingen, '94.

Assistant in Physics and Astronomy at Wesleyan, 1885-86; Teacher in Mathematics in Genesee Seminary, Lima, N. Y., 1886-90; Instructor in Mathematics at the Massachusetts Institute of Technology, 1890-95; Student at Göttingen, 1891-94; Assistant Professor, Massachusetts Institute of Technology from 1895.

Author of Ueber Pseudominimalflächen, 1895; Plane and Solid Analytic Geometry (with Professor Bailey) (1897).

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THEODORE HOUGH, A.B., PH.D., Assistant Professor of Biology.

A.B., Johns Hopkins University, '86; Рн.D., Johns Hopkins University, '93.

Instructor in McDonogh School, Maryland, 1886-89; Instructor in Biology, Massachusetts Institute of Technology, 1893-95; Assistant Professor of Biology from 1895.

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WILLIAM Z. RIPLEY, S.B., Ph.D., Assistant Professor of Sociology and Economics.

M. I. T., '90, I.

S.B., M. I. T., '90; A.M., '92, Ph.D., '93, Columbia.

Graduate Student, Massachusetts Institute of Technology, 1890-91; University Fellow, Columbia College, 1891-93; Instructor in Economics, Massachusetts Institute of Technology, 1893-95; Assistant Professor from 1897.

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JOSEPH J. SKINNER, C.E., PH.D., Assistant Professor of Mathematics.

Yale, '69.

Ph.B., '69, C.E., '74, Ph.D., '76; Yale.

Instructor in Engineering and Mathematics (and for part of the time in Physics and French), Sheffield Scientific School, Yale, 1873-81; Computer and Draughtsman, Statistical Atlas of Ninth Census, 1873-75; Manager and Treasurer of the American Electric Co., New Britain, 1881-83; Instructor in Mathematics, Massachusetts Institute of Technology, 1885-96; Assistant Professor from 1896.

Author of a book on Approximate Computations, and of some papers in scientific journals.

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GEORGE H. BARTON, S.B., Assistant Professor of Geology.

M. I. T., '80, III.

Assistant in Drawing, 1880-81; Hawaiian Government Survey, 1881-83; Assistant in Mineralogy and Lithology, 1883-89; Instructor in Determinative Mineralogy, 1888-89; Instructor in Geology, 1889-96; Assistant Professor of Geology from 1896.

Author of various papers on geology of Massachusetts, Hawaii, Labrador, and Greenland, published in Proceedings of Boston Society of Natural History, American Journal of Science, American Geologist, Science, Technology Quarterly, etc.

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ARTHUR G. ROBBINS, S.B., Assistant Professor of Highway Engineering.

M. I. T., '86, I.

Assistant in Civil Engineering, 1886-SS; Instructor in Civil Engineering, 1885-93; Instructor in Highway Engineering, 1893-96; Assistant Professor from 1896.

Author of several articles in Technology Quarterly, An Elementary Treatise on Plane Surveying and Navigation.

Residence, Highland Street, West Newton.



WILLIAM H. LAWRENCE, S.B., Assistant Professor of Architecture.

M. I. T., '91, IV.

Instructor in Architecture, 1891-96; Assistant Professor from 1896. Author of Elements of Shades and Shadows, Principles of Perspec-

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HENRY K. BURRISON, S.B. . . . . Instructor in Mechanical Drawing. M. I. T., '75, I. Residence, Lincoln Park, West Newton, Instructor in Sanitary Chemistry. ELLEN H. RICHARDS, S.B., A.M. . M. I. T., '73, V.; A.M., Vassar, '70. Residence, 32 Eliot Street, Jamaica Plain. Instructor in Freehand Drawing. CHARLES L. ADAMS . . . . Residence, 256 Lamartine Street, Jamaica Plain. Instructor in General Chemistry. PETER S. BURNS, Ph.D. . . . Iowa State College, '86; Δ. T. Δ. Residence, Milton. JOHN W. SMITH . . Instructor in Industrial Chemistry and Textile Coloring. Residence, 7 Brookfield Street, Roslindale. Instructor in Mechanical Engineering. George W. Hamblet, S.B. . . . M. I. T., '88, II. Residence, 506 Lowell Street, Lawrence. Instructor in Electrical Measurements. FRANK A. LAWS, S.B. M. I. T., '89, VI. Residence, Brockton. NATHAN R. GEORGE, JR., A.M. . Instructor in Mathematics. Harvard, '90; Θ. Δ. Χ.; Φ. Β. Κ. Residence, 18 Cumberland Street. HARRY M. GOODWIN, S.B., PH.D. . . . . . . . Instructor in Physics. M. I. T., '90, VIII.; Ph.D., University of Leipzig, '94.

Residence, 232 Townsend Street, Roxbury.

M. I. T., '90, VI.	. Instructor in Electrical Engineering.								
Leonard M. Passano, A.B Johns Hopkins, '89. Re									
Charles H. L. N. Bernard Chaptal College, Paris, '77. Re	. Instructor in Modern Languages.								
	rer, '68; Institution Springer, Paris, '70. sidence, 69: Parker Street, Roxbury.								
WILLIS R. WHITNEY, S.B., PH.D. M. I. T., '90, V.; PH.D., Leipzig,	'96.								
Re	esidence, 71 Pinckney Street.								
CARLETON A. READ, S.B M. I. T., '91, II.	, Instructor in Mechanical Engineering.								
Re	Residence, 45 Saunders Street, Allston.								
James Swan, S.B. (Absent) . M. I. T., '91, Π.; Δ. Κ. Ε.	Instructor in Naval Architecture.								
G. Russell Lincoln, S.B M. I. T., '71, III.	Instructor in Sanitary Chemistry.								
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M.A., Amherst, '89, Δ. U.; S.B., 1	M. I. T., '92, VI. sidence, 83 Centre Street, Brookline.								
***	continue, of continue continue, and								
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Leon E. Bernard	Instructor in Modern Languages. sidence, 37 Falmouth Street.								
S.B., Harvard, '87, B. O. II.; Ph.I	D., Johns Hopkins, '92. sidence, 72 Pinckney Street.								
BENJAMIN E. CARTER, JR., A.M Harvard, '90.									
Henry G. Pearson, A.B	Instructor in English.								

FRANK H. THORP, S.B., PH.D. . . . Instructor in Industrial Chemistry. М. I. T., '89, V.; Рн.D., Heidelberg, '93. Residence, Oriole Street, West Roxbury. CHARLES E. FULLER, S.B. . . . Instructor in Mechanical Engineering. M. I. T., '92, II. Residence, Wellesley. Instructor in Mechanical Engineering. WILLIAM A. JOHNSTON, S.B. . . . M. I. T., '92, II. Residence, Belmont. CHARLES F. PARKE, S.B. . . Instructor in Mechanical Engineering. M. I. T., '92, II. Residence, Taunton. . . . . . . . . Instructor in History. IOHN O. SUMNER, A.B. . Harvard, '87. Residence, Hotel Bristol. WILLIAM H. WALKER, B.S., A.M., PH.D. . Instructor in Analytical Chemistry. B.S., Pennsylvania State College, '90, θ. N. E., φ. K. Σ.; A.M., Ph.D., Göttingen. '92. Residence, The Oxford. Samuel P. Mulliken, S.B., Ph.D. . . . Instructor in Organic Chemistry. M. I. T., '87, V.; Ph.D., Leipzig, '90. Residence, Wollaston. . . . . Instructor in Sugar Analysis. GEORGE W. ROLFE, A.M. A.B., Harvard, '85; A.M., Harvard, '86. Residence, 40 Broadway, Cambridge. L. Kimball Russell, S.B. . . . . . . Instructor in General Chemistry. M. I. T., '86, V. Residence, Arlington. ERVIN KENISON, S.B., Instructor in Mechanical Drawing and Descriptive Geometry. M. I. T., '93, II. Residence, Malden. . . . . . . Instructor in Physics. CHARLES L. NORTON, S.B. . M. I. T., '93, VI. Residence, Manchester, KILBURN S. SWEET, S.B. . . . . Instructor in Civil Engineering. M. I. T., '93, I.

F. JEWETT MOORE, A.B., PH.D. . . . Instructor in Analytical Chemistry.

A.B., Amherst, '89, X. Φ.; Ph.D., Heidelberg, '93.

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W. Felton Brown	
Frederic H. Keyes, S.B M. I. T., '93, II.	Instructor in Mechanical Engineering. Residence, Newtonville.
JUSTUS ERHARDT	Instructor in Modern Languages. Residence, 56 Clarendon Street.
HENRY FAY, A.B., Ph.D A.B., Lafayette, '89; Ph.D., Jo	Instructor in Analytical Chemistry.  phns Hopkins, '95.  Residence, 387 Boylston Street.
HARRY W. GARDNER, S.B M. I. T., '94, IV.	Instructor in Architecture.  Residence, Endicott.
GEORGE B. HAVEN, S.B M. I. T., '94, II.	Instructor in Mechanical Engineering.  Residence, 196 Walnut Avenue, Roxbury.
Frank P. McKibben, S.B M. I. T., '94, I.	Instructor in Civil Engineering.  Residence, 466 Massachusetts Avenue.
Joseph W. Phelan, S.B M. I. T., '94, V.	Residence, 12 St. James Avenue.
ALEXANDER W. Moseley, S.B. M. I. T., '91, II.	Instructor in Mechanical Engineering.  Residence, 71 Pinckney Street.
WILLIAM J. DRISKO, S.B M. I. T., '95, VIII.	Instructor in Physics. Residence, 123 St. Botolph Street.
JAMES F. NORRIS, A.B., PH.D. A. B., Johns Hopkins, '92; PH	Instructor in Organic ChemistryD., Johns Hopkins, '95. Residence, 387 Boylston Street.
Samuel C. Prescott, S.B M. I. T., '94, V.	Instructor in Biology.  Residence, 334 Broadway, Cambridge.
Archer T. Robinson, A.B Harvard, '96, \Phi. B. K.	Instructor in English.  Residence, 42 Pinckney Street.
ARTHUR W. WEYSSE, PH.D A.B., Harvard, '91; A.M., Har	vard, '92; Рн.D., Harvard, '94. Residence, 168 West Brookline Street.



Franklin H. Robbins, S.B M. I. T., '94, II.	Assistant in Mechanical Drawing.  Residence, 13 Waterhouse Street, Cambridge.
JESSE H. BOURNE, S.B	Assistant in Mechanical Engineering. Residence, Foxboro.
CARL H. CLARK, S.B	Assistant in Naval Architecture.  Residence, 66 Clifton Street, Roxbury.
Frederick A. Hannah, S.B M. I. T., '95, II.	Assistant in Mechanical Engineering.  Residence, 146 Massachusetts Avenue.
Frederic W. Howe, B.S New Hampshire College of A	griculture and Mechanic Arts, '94, Q. T. V. Residence, 12 St. James Avenue.
CHARLES R. WALKER, S.B M. I. T., '93, V.	Assistant in General Chemistry.  Residence, 155 Western Avenue, Cambridge.
Frank B. Masters, S.B M. I. T., '95, II.; Σ. A. E.	Assistant in Mechanical Engineering.  Residence, 20 Morse Street, Newton.
CHARLES M. SPOFFORD, S.B M. I. T., '93, I.	Assistant in Civil Engineering.  Residence, Georgetown,
REUBEN E. BAKENHUS, S.B M. I. T., '96, I.	
EDWARD M. BRAGG, S.B M. I. T., '96, XIII.	Assistant in Mechanical Engineering.  Residence, 239 Prospect Street, Cambridge.

George K. Burgess, S.B M. I. T., '96, VIII.	Assistant in Physics.  Residence, Otis Street, Newtonville.
WILLIAM D. COOLIDGE, S.B M. I. T., *96, VI.	
LEONARD H. GOODHUE, S.B M. I. T., '96, V.	Assistant in Analytical Chemistry.  Residence, Salem.
Amadeus W. Grabau, S.B M. I. T., '96, XII.	Assistant in Geology.  Residence, 87 Appleton Street.
Harrison W. Hayward, S.B. M. I. T., '96, X.	Assistant in Industrial Chemistry.  Residence, 79 Milton Avenue, Hyde Park.
Minor S. Jameson, S.B M. I. T., '96, I.	
RALPH R. LAWRENCE, S.B M. I. T., '95, VI.	
CLARENCE W. PERLEY, S.B M. I. T., '96, VII.	Assistant in Biology.  Residence, 35 Hamilton Street, Lynn.
WILLIAM L. ROOT, S.B M. I. T., '96, X.	Assistant in Oil and Gas Analysis.  Residence, 666 Dudley Street, Dorchester.
HAROLD C. STEVENS, S.B M. I. T., '96, 1.	Assistant in Civil Engineering.
Albert J. Wells, S.B M. I. T., '96, II.	Assistant in Mechanical Drawing.  Residence, 201 St. James Street, Roxbury.

## INSTRUCTORS AND ASSISTANTS IN THE MECHANIC ARTS.

. Instructor in Woodwork and Foundry-work. THEODORE B. MERRICK . Residence, Arlington Heights. JAMES R. LAMBIRTH . . . . . . . Instructor in Forging. Residence, 106 Paul Gore Street, Jamaica Plain. . . . Instructor in Machine-tool Work. ROBERT H. SMITH Residence, 567 Tremont Street. . . . . . . Assistant in Woodwork. MINOT A. BRIDGHAM Residence, Arlington Heights. EVERETT H. MASTERS . . . . . . Assistant in Forging. Residence, 11 Walnut Avenue, Roxbury. . . . Assistant in Machine-tool Work. IRA G. STUDLEY Residence, Rockland.

INSTRUCTOR IN GYMNASTICS.

HERMAN BOOS.

Residence, The Garfield, Rutland Square.

### Teachers and Lecturers for the Year 1896 - 97.

TRUMAN H. BARTLETT, on Modelling.

Louis Bell, Ph.D., on the Electrical Transmission and Utilization of Power.

George W. Blodgett, S.B., on the Applications of Electricity to Railway Signalling.

HENRY CARMICHAEL, Ph.D., on Electrolysis of Brine.

WILLIAM R. COPELAND, A.B., on Bacteriology of Water and Sewage Purification.

HOWARD C. FORBES, S.B., on Commercial Electrical Testing.

John R. Freeman, S.B., on the Hydraulics of Fire Protection and on Fireproof Construction.

Hollis French, S.B., on Electrical Engineering Practice and Specifications.

DAVID A. GREGG, on Pen and Ink Drawing.

HAMMOND V. HAYES, Ph.D., on Telephone Engineering.

ERNEST F. HENDERSON, Ph.D., on German History.

HENRY M. Howe, A.M., S. B., on Metallurgy.

Daniel D. Jackson, S.B., on the Microscopical Examination of Water Supplies.

CHARLES D. JENKINS, S.B., on Illuminating Gas, and on Pottery and Tiles.

SIMEON C. KEITH, JR., S.B., on Industrial Biology.

ERNEST A. LE SUEUR, S.B., on the Industrial Applications of Electro-Chemistry.

ARTHUR D. LITTLE, on Paper.

JAMES W. LOVELAND, S.B., on Manufacture of Soaps.

Samuel W. Mead, on Architectural Design.

WALTER S. MOODY, on Transformers.

ODIN B. ROBERTS, S.B., A.M., LL.B., on the Nature and Function of Patents for Inventions.

Louis J. Schiller, on Sugar and Sugar Refining.

FRANK G. STANTIAL, S.B., on Sulphuric Acid.

ELIHU THOMSON, on Recent Developments in Applied Electricity.

Ross Turner, on Water Color.

C. HOWARD WALKER, on the History of Ornament.



Francis A. Walker, President.\*
HARRY W. Tyler, Secretary.

JOHN D. RUNKLE, George A. Osborne. IAMES M. CRAFTS. ROBERT H. RICHARDS. WILLIAM H. NILES. CHARLES R. CROSS. GAETANO LANZA. GEORGE F. SWAIN. FRANCIS W. CHANDLER. ALPHONSE N. VAN DAELL. WILLIAM T. SEDGWICK. DAVIS R. DEWEY. SILAS W. HOLMAN. WEBSTER WELLS. CECIL H. PEABODY. ARLO BATES. JOHN BIGELOW, JR. Desiré Despradelle. PETER SCHWAMB. C. FRANK ALLEN. Alfred E. Burton. DWIGHT PORTER. HEINRICH O. HOFMAN. THOMAS E. POPE. ELEAZER B. HOMER.

GEORGE T. DIPPOLD. HENRY P. TALBOT. CHARLES F. A. CURRIER LINUS FAUNCE. WILLIAM O. CROSBY. JEROME SONDERICKER. ALLYNE L. MERRILL. DANA P. BARTLETT. EDWARD F. MILLER. FRANK VOGEL. WILLIAM L. PUFFER. FREDERICK H. BAILEY. FRED L. BARDWELL. AUGUSTUS H. GILL. ARTHUR A. NOYES. S. Homer Woodbridge. HARRY E. CLIFFORD. RICHARD W. LODGE. FREDERICK S. WOODS. THEODORE HOUGH. WILLIAM Z. RIPLEY. Joseph J. Skinner. GEORGE H. BARTON. ARTHUR G. ROBBINS. WILLIAM H. LAWRENCE.

## FRANCIS AMASA WALKER.

HE founder of the Walker family in America was Captain Richard Walker, of Lynn, who was born in 1611, and came to this country when nineteen years of age. He was a member of the Honorable Artillery Company of London, and one of the first to join the Ancient and Honor-

able Artillery Company when it was established in Boston. Phineas Walker, the descendant of Richard, in the fifth generation, served with Wolfe in Canada, and accompanied Ethan Allen at the assault on Ticonderoga. Later, he did good service along the Atlantic coast as Captain of the Militia Company of Woodstock, Conn. Walter Walker, the son of Captain Phineas, moved from Connecticut and settled at North Brookfield, Mass., in the year 1800. The Rev. Dr. Snell, pastor of the parish from 1798, said of him in an anniversary sermon: "Deacon Walker was a very useful man in the church, as well as society. His influence was uniformly in support of order, peace, and religion." Amasa, the son of Walter, and the father of Francis Amasa Walker, was born at Woodstock, in 1799. He studied, with William Cullen Bryant and Judge Cheever, under the Dr. Snell mentioned above, but through weak health was forced to give up a college career. He spent some years as a merchant in Boston, but soon after the birth of his son Francis Amasa, in 1840, he removed to the homestead at North Brookfield, to devote himself to more congenial pursuits. He served in both branches of the Massachusetts Legislature, and, for some years, as Secretary of State to the Commonwealth. In 1860 he cast his vote as a National Elector, for Lincoln, and two years after was sent to Congress. He and his brother, Freeman, were prominent in the Liberty party and the Free-Soil party, and active in the so-called "underground railway" for the assistance of escaping slaves, many of whom were sheltered under his hospitable roof on their way northward. Amasa Walker

was most distinguished, however, as an economist, and his work fell in much the same lines as did that of his more famous son. He was a lecturer on political science at Oberlin College and at Amherst, from which institution he received the honorary degree of LL.D. He published two notable books: the "Science of Wealth," which was translated into Italian, and the "Nature and Uses of Money and Mixed Currency." He attended the peace congresses of London and Paris in 1843 and in 1849, and was a member of the American Peace Society. His wife, Hannah



THE WALKER HOMESTEAD AT NORTH BROOKFIELD.

Ambrose, was the daughter of a New Hampshire merchant, and a woman of great force of character. Her keen sense of honor and strong patriotism are indicated by an anecdote related by her son. Obtaining an unexpected leave of absence, after the Peninsula Campaign, Major

Walker hurried home without notifying his family. He found his mother seated by the window with an open Bible in her lap, gazing out to the southward. As her son, of whom she was dreaming, appeared suddenly before her, instead of a glad welcome, her first thought was for her country's pressing need; and the first words that sprang to her lips were, "You haven't left the army, have you?"

Francis Amasa Walker was born in Montgomery Place, Boston, July 2, 1840. His early youth was spent in North Brookfield, where he began his education in the local schools, public and private. In 1850 and 1851 he studied at the academy of the neighboring town of Leicester, and there finished his preparation for college. He spent another year, however, in the study of Latin and Greek at Lancaster Academy, and entered Am-

herst in 1855, at the age of fifteen years. In the middle of his Sophomore year he was compelled to remain out for some months, on account of illness, and he finally graduated with the Class of 1860, a Φ. B. K. man, and a member of the A. K. E. fraternity. He gained the Sweetser essay prize and the Hardy prize for extempore speaking. Of this latter a classmate says: "It was offered to the man who should make the greatest improvement in extemporaneous speaking during the Sophomore and Junior years. . . . I remember Walker's final address well; it was delivered before the whole body of students of the college, and it was very fine. No extemporaneous address that I have heard him make since, as it seems to me, has equaled it in impressiveness." Another classmate writes: "General Walker's college career was characterized by steadiness of purpose and brilliancy of execution. In his day all of the college studies were 'required,' but none of them were slighted by Walker. In the last two years of the course he displayed great fondness for economic, historical, and philosophical pursuits, and in these he was pre-eminent. He possessed a remarkable power of quick resting. He could turn from one tiresome study to another, apparently with little effort, and after a hard forenoon's work in three or four distinct fields, take a bit of a nap, and start perfectly fresh for his afternoon's duties. His energy was not satisfied by mere perfunctory fulfillment of his prescribed duties; he sought and gained great distinction in athletics, in the rhetorical exercises of the 'Open Societies,' in college-editorial writing, and in chess." Although the youngest man in his class, "his influence was greater than that of any one else, for he was rightly regarded as fair to all. He was believed by all his associates to be thoroughly honest in thought, and word, and deed, and his opinions on every subject were treated with respect." His love of freedom at this time is shown by the following motto written in his classbook at graduation, "Let us ever defend in our measure of strength the rights of man and the excellent dignity of self-government."

Immediately after his graduation Francis Walker began the study of law in the office of Messrs. Devens and Hoar, at Worcester. The senior member of the firm was the late Judge Charles Devens, and his partner, the present United States Senator from Massachusetts, Hon. George F. Hoar. Devens was Major of the Third Battalion of the Massachusetts

Militia, and at the outbreak of the war he took his command to the front. In the summer he returned to recruit the Fifteenth Massachusetts Volunteers, and the young student in his office, having just attained his majority, enlisted, August 1, 1861, as sergeant major of the regiment. In September, however, General D. N. Couch obtained Captain Walker's appointment as his assistant adjutant general, and the young man, thus, for the first time undertook the charge of this vital and exacting department of military life. In the spring of 1862, when the army was organized into army corps, General Couch took command of the First Division of the Fourth Corps, and March found him at Fortress Monroe, accompanied by his assistant adjutant general, ready for the advance upon Richmond. The corps went through the Peninsula Campaign, and fought the battles of Williamsburg and Fair Oaks in the advance, and the Seven Days' Battles,



FRANCIS A. WALKER WHEN IN AMHERST COLLEGE.

culminating at Malvern Hill, in the retreat. In the last-named engagement the First Division was attacked incessantly for three hours and a half, and lost six hundred men. In each of these three encounters Captain Walkers' coolness and gallantry gained the special commendation of his commander. In one instance General Couch reports that he made a daring personal reconnoissance, and had his horse shot under him. In August the young officer was promoted to the rank of major; and in October, when Couch was placed in command of the Second Corps, Major Walker was made his adjutant general. This position he held for the rest of his military ca-

reer, under Major General W. S. Hancock and Major General G. K. Warren, and the comprehensive knowledge he, as a staff officer, enjoyed of all the operations of the army, peculiarly fitted him for the works which he afterwards undertook, the "History of the Second Army Corps" and the "Life of General Hancock." The first battle of the Second Corps under General Couch, was the terrible defeat of Fredericksburg. General Burnside, having superseded McClellan, threw his army across the Rappa-

hannock and attacked the Confederate forces in an impregnable position. The Second Corps bore the very brunt of this attack. In his history General Walker says: "All that the Second Corps could do was now done. It had obeyed its instructions to attack a strong position, thoroughly fortified, bristling with eighty guns, and held by forty thousand infantry. . . . All that had been done had been done without the slightest help from that inspiration which springs from the anticipation of victory. Every officer and every soldier in the ranks had seen and felt for himself that the attempt to carry the position was hopeless. Yet nearly four thousand men had fallen in obedience to orders." After this carnage the historian relates that Couch, broken-hearted at the defeat and the loss of his men, rode slowly down the whole line of the corps within easy pistol shot of the enemy, as if courting death. In this sad and dangerous ride he was accompanied by three companions, almost against his will. General Walker states that one of these three men was "an officer of the staff," but does not add that he himself was that officer, General Couch declares that a few weeks later Major Walker had almost made up his mind to give up his staff position, and take command of a regiment. "He was almost fiercely loval, and considered it to be his sacred duty to go right into the front line, and there fight with his Massachusetts comrades." He was finally overruled, however, in this resolution. Later, as a result of the battle of Fredericksburg, Burnside was relieved, and Joseph E. Hooker made commander in chief. During the winter months the army lay quiet, and in January, Major Walker was promoted to the rank of Lieutenant Colonel. In April the troops again moved forward, and early in May fought the battle of Chancellorsville, only less disastrous than the former defeat, and almost on the same ground. Colonel Walker was seriously wounded early in this engagement by the bursting of a shell, which nearly cost him his left hand. He was forced to take a leave of absence for a time; but returned to the Corps in the early autumn, soon after Gettysburg. He received later the brevets of colonel and brigadier general for "gallant and meritorious services at the battle of Chancellorsville, where he was severely wounded." This season closed with the lesser engagements of Auburn, and Bristoe Station, and Mine Run, in the two former of which the Second Corps acted as the rear guard of the Union army,

and was at one time opposed single-handed to Lee's entire force. All the next year, 1864, the Second Corps was with Grant in the advance upon Richmond. It took part in ten pitched battles, and lost six thousand men in the Wilderness, five thousand at Spottsylvania, and three thousand at Cold Harbor. Colonel Walker's last engagement was at Ream's Station, on the twenty-fifth of August. Seeking some commander in the dark-



FRANCIS A. WALKER AND HIS MOTHER IN 1863, AFTER
THE BATTLE OF CHANCELLORSVILLE.

ness he rode into the enemy's lines, and was captured. While being marched with other prisoners along the road to Richmond he escaped into a swamp, and lay there until nightfall. He then made his way by the stars to the Appomattox River, and attempted to swim across to the Union lines. The current, however, carried the exhausted swimmer below the Northern pickets, and he was only saved from drowning by recapture. He was imprisoned in Petersburg Jail, and then carried to Libby Prison, where he was kept for six weeks. The dampness of the prison and the lack of proper food broke down his health, and he was released upon parole. Later, after he had been exchanged, he attempted to return to the army, but his constitution

had not sufficiently strengthened, and, indeed, it was some years before he completely recovered from the effects of his imprisonment. General Hancock's exclamation, "Colonel Walker is the best adjutant general that I ever knew!" is a tribute to the faithfulness with which the young officer performed his routine duties; while his coolness and gallantry are commended by his superiors in the report of every battle.

In the autumn of 1865, when he was once more partially restored to health, General Walker accepted the position of instructor in Greek and Latin in Williston Seminary, at Easthampton, in the Connecticut valley. In the same year he was married to Exene Stoughton, of Gill, Massachusetts. He spent three years in the seminary, teaching and studying, but in 1868 he left Easthampton to take up editorial work on the Springfield Republican. The brilliant founder of the Daily Republican, "Sam Bowles," was editing the paper at that time, and it was said that "if there was any ability in a young man, the Republican office would develop it." Under this influence Walker became a "brilliant and forcible writer, especially versed in political economy," for he had already taken up his father's line of work. In January, 1869, he was appointed, at the instance of Mr. David A. Wells, then Special Commissioner of the Revenue, Chief of the Bureau of Statistics at Washington. This position General Walker held for thirteen months. The present Chief of the Bureau, Mr. Worthington C. Ford, says of him, in this connection: "His predecessor, Alexander Del Mar, introduced the practice of printing the monthly reports of trade and navigation, and General Walker extended the scope of these issues, besides introducing many changes in the form and substance of the matter printed. . . . He stamped his individuality upon the forms used in the Bureau, many of which were in use, unchanged, in 1893, when I assumed charge of the Bureau. His capacity for organization was shown in the changes he introduced, and his short experience in this office indicated his fitness for undertaking the much greater task of the United States Census." On the Ninth Census, General Walker was engaged as Superintendent during 1870 and 1871. It was desired to make some sweeping reforms in the manner of taking this census, especially by the substitution of skilled enumerators for the marshals hitherto employed. General Garfield, then chairman of the Committee of the House on the Census, made an exhaustive report in favor of such a change, but the measure was defeated in the Senate. In spite, however, of the inadequate system in use, General Walker introduced more scientific treatment of the material, and added a new feature in the form of statistical maps. After the completion of this work he undertook the Commissionership of Indian Affairs,-a position he held from November, 1871, to March, 1873. He studied the Indian question deeply, traveling, it is said, five hundred miles beyond the railroads to visit some of the more distant tribes, and published a small volume on the subject two years later. The work was not satisfactory to him, however. Mr. D. M. Browning, the present Commissioner, says: "He brought to the work of this Bureau the fine executive qualities which had distinguished his superintendency of the Census work. But he became Commissioner near the beginning of the reforms in the service which commenced with what was known as 'Grant's Peace Policy' for the Indians, and he found so



FRANCIS A. WALKER AT TWENTY.

much to encounter and reconstruct that the work was distasteful, and he was glad to resign," General Walker's views on this question are best indicated by a few sentences from his book, "The Indian Question": "The United States have, without much order or comprehension, but with a vast amount of good will, undertaken enterprises involving considerable annual expenditures for the advancement of individual tribes and bands. but the true permanent scheme for the management and instruction of the whole body of Indians within the control of the Government is yet to be created. . . . No subject of legislation could be more perplexing and

irritating; nor can the outlay involved fail for many years to be a serious burden upon our industry. But the nation cannot escape its responsibility for the future of this race, soon to be thrown in entire helplessness upon our protection. . . . Surely we shall be clearer in our lives, and freer to meet the glances of our sons and grandsons, if in our generation we do justice and show mercy to a race which has been impoverished that we might be made rich."

Early in 1873, a Professorship of Political Economy and History having been established in the Sheffield Scientific School at Yale, General Walker was called to the position. This chair he filled until 1881, for the first seven years of the time being mainly occupied with scientific pursuits, lecturing, and writing. Professor Sedgwick says of this period: "When I entered the Sheffield Scientific School at Yale, in 1874, Prof. Francis A. Walker had charge of Political Economy and History in the school, and I shall never forget my first sight of him, when our class filed into the old physics lecture room for its first lecture in Political Economy. He was walking quickly back and forth behind the long demonstration table, glancing now out of the windows, now toward the Freshmen, whom he was to teach. He was young, he was strong, he did not care to sit down, yet he was soberly and seriously in dead earnest. It was, however, mainly his intense vitality which seemed to distinguish him from all other professors, and when he began to speak, the rapid yet clear stream of his thought carried us all with him. It was not my privilege to have him as a teacher except for one course of elementary lectures; but on one occasion, when our class and the one above it got into a rush after a five o'clock lecture, as I drew breath after a vigorous personal encounter with one of our opponents, I saw my most intimate friend and classmate whirled past me as if from a catapult, and in the darkness discovered that Professor Walker had joined in, and was tumbling the contestants hither and thither in the most astonishing fashion. Naturally the news spread, and the rush came to an end. After my graduation I saw more of Professor Walker. I did a good deal of coaching in Latin (which is required for admission at the Yale Scientific School), and Professor Walker generally examined my men. In his Latin he was remarkably exact in rendering, keen in analysis, and brilliant in his vocabulary. Over all his work was that glow and intensity of feeling (doubtless the expression of superabundant vitality) which was always so characteristic of him. It was the custom for the graduating class to vote upon the question 'Who is your most popular professor?' and Professor Walker, I think, never failed to carry off the palm. In the Sheffield School traditions of him still linger as one who was broad, able, incisive, executive, and intellectually powerful beyond almost any man of his time." But his collegiate duties did not

occupy Professor Walker's whole attention. He served on the School Committee of New Haven for four years, and on the Connecticut Board of Education for five. He was Chief of the Bureau of Awards at the Exposition at Philadelphia in 1876, and State Railroad Commissioner in 1879. He went to Paris in 1878 as a United States delegate to the International Monetary Conference, where he upheld the same views of the currency question which he enunciated in his book of last summer. He maintained then, as later, that the world suffered severely from an insufficient supply of sound money through the demonetization of silver. He said at the Conference, "Suffocation, strangulation, are words hardly too strong to express the agony of the industrial body when embraced in the fatal coils of a contracting money supply." Besides his work at Yale, during this period Professor Walker delivered a course of lectures on "Money" at Johns Hopkins, and published several important works on economic science,-"The Statistical Atlas of the United States," "The Indian Question," "The Wages Question," "Money," and "Money, Trade, and Industry." In 1880 he left his work at New Haven, to take charge of the Tenth Census. This time a new law was passed by which the improved system urged by General Walker and General Garfield ten years before was brought into effect. The scope of the census was immensely enlarged, and a large corps of skilled enumerators and experts gathered together to conduct the special investigations. The work filled twenty-two volumes, and Col. Carroll D. Wright, now Superintendent of the Census, said of it, in the American Journal of Sociology for November, 1895: "The contributions of the Tenth Census to social science constitute the most colossal official contribution that had ever been made by any government. The great variety of topics, their exhaustive treatment, the large number of specialists engaged, the clearness of presentation - everything connected with the Tenth Census - marked it as an epoch-making investigation. Its faults were the faults of any such great undertaking, but they were less than the faults of any previous census; and when it is understood that no other government embodies in its decennial account inquiries outside of the ordinary inquiries relating to population, the vast undertaking superintended by General Walker is more readily comprehended. This great work was conducted on the broad basis

laid down by him, and the results secured for him the admiration of statisticians in every part of the world."

At this time, in 1881, the Corporation of the Massachusetts Institute of Technology were looking about them for a man to whom the future of the young school might be intrusted. President Runkle, who succeeded William Barton Rogers, in 1870, had tendered his resignation in 1878, worn in health by the anxieties of the position, and by the financial difficulties of the Institution. Professor Rogers consented to resume the Presidency, though in feeble physical condition, until a suitable successor could be found; and in June of 1880 he wrote as follows to General Walker, then still engaged upon the labors of the Census:—

"DEAR PROFESSOR WALKER: Since my conversation with you in Washington, some weeks since, I have conferred with members of the Corporation of the Institute of Technology on the subject of choosing a President for the Institute, and I have been authorized, in concert with the Committee on the School, to offer the presidency to the person whom we may consider to be best fitted, by scholarly training, zeal, and administrative ability, to carry forward the educational plans of the Institute.

"I now write with the authority of the 'Committee on the School' to offer the position to you, and I need not say, my dear Professor, how earnestly I desire that you will accept it.

Yours faithfully,

WILLIAM B. ROGERS."

After a short hesitation General Walker made up his mind to undertake the task, and after the completion of his work in Washington he resigned the professorship he still held at Yale, and on Nov. 1, 1881, assumed the office of President of the Institute. Professor Rogers, in introducing to the Society of Arts its new presiding officer, said: "In making this introduction, personally, of President Francis A. Walker, I must say I do so in the fullest confidence, not only in his capacity for carrying out the hopes and purposes of this school, but of the hearty sympathy and earnest regard which he entertains for its past history, and for its future development. I trust in him as I would trust in myself were I of his years, and had I his experience in administrative work; and in saying this I say all that any man can say in reference to his successor. I commend him to you, knowing what are his sympathies, and what are

his capacities of usefulness; and I commend you to him, knowing you for these many years as my friends, personally, and as the friends of this Institute of Technology." The history of President Walker's life, from this time on, is the history of Technology. Professor Runkle said that "He raised the Institution from a struggling technical school to a great scientific university. That was always his idea,—to keep it from being narrow, like many schools of this sort;" and although President Walker minimized the



FRANCIS A. WALKER, PRESIDENT OF THE INSTITUTE.

influence of his own work. declaring only last autumn that "no institution in the world was ever developed so strictly according to the general ideas and the specific plans upon which it was first conceived and laid out," in consequence of "the astounding prescience and grasp of principles which characterized the founder and first President of the Institute, Dr. Rogers," yet, nevertheless, his own influence was very powerful in broadening the scope of the curriculum, and making it what it is to-day. In his

first report as President, special attention is directed to the department of General Studies, as "a preparation for active life, liberalizing in its tendencies, but without any influence to alienate the student from the ideas, tastes, and habits which are appropriate to practical business pursuits." At this time, in 1881, all the eight courses of instruction, the three hundred and two students and the thirty-seven members of the instructing staff, were crowded into the Rogers Building and a one-story brick annex on the site of the present Walker Building. But the next three years were to be the most momentous in the history of the school. In 1882 the Walker Building was erected, and

the Chemical, Physical, Architectural, and English departments were moved into it. The department of Electrical Engineering, destined to become the largest in the Institute, was also created in this year as an offshoot of the Course in Physics. In 1883 the Garrison Street shops were built, and the department of Applied Mechanics, which before was confined to a single small room, and the laboratory of Steam Engineering, which "found its space only in the dark hallway of the basement of the Rogers Building," were there expanded. Great progress was made in the Chemical department, the work of four years, by systematization, being fitted into three, and more advanced subjects introduced. Extensive changes were also made in the "Natural History," now the Biological, Course, which President Walker was specially anxious to make a good preparation for the study of medicine. In 1884 the rolls showed a total of five hundred and seventy-nine students and fifty-seven members of the instructing staff, in both cases about double the enrollment at the beginning of President Walker's term. Course VI. was already second in the number of students. The large drawing room in Rogers was fitted up in this year and the Mining laboratory extensively altered, so that three times as many students could be accommodated as before. Entrance examinations were held now for the first time outside of Boston, in Chicago, Cincinnati, St. Louis, San Francisco, and Washington. In 1885 President Walker took a short leave of absence abroad, and visited the Universities of Cambridge, Edinburgh, Glasgow, and St. Andrews, and the principal technical schools in France and England. On his return he wrote, "I saw no laboratories, whether of Chemistry, of Physics, or of Mechanics, which are equal to our own in capacity or appointments." In 1886 the curriculum of the fourth year in the department of Civil Engineering was reorganized, providing for the three options as they at present exist. In 1887 the investigation of the water supply of Massachusetts by Dr. Drown and his staff was undertaken. A bequest of a hundred thousand dollars from Richard Perkins, and the grant of a similar amount by the State, made the financial burden of the Institute much lighter. In 1888 another grant of a hundred thousand dollars was made, and the number of students was increased by almost a hundred, rising to eight hundred and twenty-seven. The course in Chemical Engineering was founded, and an important change made in the Biological department, by which the instruction in Natural History was given within the walls of the Institute, and not, as before, under the direction of the Natural History Society. In 1889, the debt on the Walker Building having been paid, the Engineering Building was erected, and the branches of Civil and Mechanical Engineering moved thither from the overcrowded Rogers Building. The course in Sanitary Engineering was instituted at this time. In 1890 the benefits of the new building were



PRESIDENT WALKER'S OFFICE IN THE ROGERS BUILDING.

manifest in the departments of Mining and Literature, the former spreading over the whole lower floor of Rogers, and the latter being improved by the fitting up of the present reading room. The courses in English were somewhat modified under the influence of Professor Carpenter, and the

system of co-operation between the various departments in teaching English composition, which has lately been extended, was introduced. The course in Geology was created in this year, and the treatment of the subject of Highway Engineering improved and broadened. In 1891 the number of students passed the one thousand mark; the department of English, History, and Political Science was greatly strengthened, and a Naval option in the Architectural course made prominent. In 1892 still another new building was constructed, and devoted to the department of Architecture, the removal of which from the Walker Building allowed the Physical laboratories to expand. The Emery testing machine was obtained during the second term. In 1893 the land adjoining the Engineering and Architectural Buildings, between Clarendon Street and the railroad, was pur-

chased. A large exhibit was sent from the Institute to the World's Fair, of whose Massachusetts Board of Managers, President Walker was Chairman. The option in Naval Architecture was organized into a Course. In this year, too, President Walker delivered a course of lectures at Harvard on "Land and Its Rent." In 1894 the number of students at the Institute had risen to eleven hundred and eighty-four. The need of money, however, became more and more pressing. The grant of the State in 1895 of twenty-five thousand dollars a year for six years was, therefore, extremely grateful. In 1896 President Walker delivered a course of lectures on "Bimetallism," at Harvard; and in the spring the Technology Club was founded, and the plans for a new building were drawn up. It was while busily engaged in obtaining funds for the erection of this, the fifth building, made necessary under his administration by the quadrupling of the size of the school, that President Walker's career was cut short. He died from the effects of an apoplectic stroke in the early morning of Jan. 5, 1897.

During his life in Boston, President Walker took such a share in public affairs that the *Evening Transcript* could truly say that his death made "a void in more places and wider circles of influence than would be left by the passing away of any other citizen of Boston." He did important work as a member of the Massachusetts Board of Education from 1882 to 1890, and of the Boston School Committee from 1885 to 1888. The following letter, written in 1884, shows his strong sense of duty in this matter:—

"Rev. Dr. Edw. E. Hale, D. Webster King, Esq., Lyman Mason, Esq., and others, Committee.

GENTLEMEN: I have the honor to be in receipt of your communication of the 8th inst. I do not covet any addition to my present duties; but the schools of the City and of the State have the first claim upon my time and strength, and if it were necessary for me to unload in any and every other direction in order to undertake a responsibility with which my fellow-citizens chose to entrust me regarding the public schools, I should not hesitate to do so, whatever else had to be thrown over. I am, therefore, wholly at your service.

Faithfully yours,

FRANCIS A. WALKER."

General Walker's influence on the public schools was exerted principally in two directions. First, he believed strongly in making normal schools more strictly professional, and in emphasizing the necessity of industrial training, kindergarten work, cooking, sewing, etc., in the public schools. In speaking of Industrial Education in 1887, he claimed that it (1) directs and strengthens the executive faculty or constructive passion; (2) affords greater opportunity for fresh, original, spontaneous work; (3) removes snobbishness of feeling, dislike, and contempt of manual labor; (4) improves the industrial



FRANCIS A. WALKER
IN HIS CAP AND GOWN WORN IN RECEIVING
THE DEGREE OF LL.D., AT DUBLIN
UNIVERSITY, IN 1892.

quality of citizens; (5) maintains a sense of social decency, and contributes to a desire to have things neat, agreeable, and decent. Secondly, General Walker, while on the School Committee, effected a great reduction in the time devoted to arithmetic. He disbelieved in the use of arithmetical problems as a mental training, and wished to restrict them to those necessary to give facility and accuracy in ordinary work. In consequence, the time devoted to arithmetic was greatly cut down, and other studies introduced. "Home lessons" in arithmetic were entirely dropped. President Walker also acted, from 1884 to 1890, as Chairman of the Massachusetts Topographical Survey Commission, which examined and ac-

cepted the work of the United States Geological Survey in the construction of the first topographical map of the State. Of the Park Commission of the City of Boston, he became a member in 1890. During his connection with this Board the number of parks and public pleasure grounds increased from six to nineteen, while the present magnificent system of parkways and boulevards, ten miles in length, was created. Seven

million dollars were spent on the work during this time. Mr. George F. Clark, the Secretary of the Department of Parks, says, "General Walker took an intense interest in the work of the department, where his keen insight and clear judgment made his services invaluable to the city." General Walker became a member of the Art Commission of Boston at the same time, in 1890, and a Trustee of the Public Library in 1896. He was President of the American Statistical Association from 1882, and always made it a point to be present at its meetings, sometimes at great personal inconvenience. He was an honorary member of the Royal Statistical Society of London, Vice President of the National Academy of Sciences, a member of the Massachusetts Historical Society and of the International Statistical Institute, President of the American Economic Association, honorary member of the American Society of Mechanical Engineers, Senator of the Phi Beta Kappa, Correspondent of the Central Statistical Commission of Belgium, corresponding member of the California Academy of Sciences, an officer of the French Legion of Honor, President of the Military Historical Society of Massachusetts, honorary member of the Literary and Philosophical Society of Manchester, Vice President of the American Society for the Promotion of Profit Sharing, Vice President of the Society of Naval Architects and Marine Engineers, a Correspondent of the Institute of France, and a corresponding member of the British Association for the Advancement of Science. He received the degree of A.M. from Amherst and Yale, of Ph.D. from Amherst and Halle, and of LL.D. from Yale, Amherst, Harvard, Columbia, St. Andrews, Dublin, and Edinburgh.

As an economist there were three principal lines of thought with which President Walker was identified,—the question of Wages and the Distribution of Wealth, the subject of Money, and the problem of Economic Reform. His name is perhaps most frequently mentioned as one of the chief opponents of the Wage Fund Theory, according to which wages were paid to labor out of a pre-determined mass of capital, and were therefore unaffected by the efficiency of the laborer. President Walker maintained, on the other hand, that "under perfect competition, the laborer would become the residual claimant upon the product of industry, the amount to be deducted on account of rent, interest, and business profits being subject to

definite principles, and, consequently, all gains in productive power would, upon this condition, inure directly to the benefit of the laborer." General Walker first attacked the almost universally accepted doctrine of the Wage Fund in a lecture at Amherst, in 1874, and expanded his views in the North American Review for January of the succeeding year. His theory has, in its general principles, largely supplanted the older one. With regard to General Walker's position on the Social Problems of the day, Dr. Dewey wrote in the Review of Reviews for February of the current year: "Mr.



FRANCIS A. WALKER IN 1895.

Walker had little patience with short-cut or mechanical schemes of social reform; and yet his sympathy for the uplifting of the oppressed was great. He recognized the benefit of trade unions at a time when sympathy was rare on the part of the educated. His sympathy, too, was more than a passing and indifferent feeling. In a magazine article published some years ago he remarks: 'I believe I was the first person occupying a chair of Political Economy to declare that sympathy with the working class on the part of the gen-

eral community may, when industrial conditions are favorable, become a truly economic force in determining a higher rate of wages; but by sympathy I certainly did not mean slobber.' He believed in the efficacy of free competition, but when he said competition he meant a real competition at every point. It was to be 'severe, searching, and unremitting,' for the workman must be able 'to withstand and return the pressure. What is wanted is the largest capability of resistance and reaction.'

Any measure, therefore, which would aid workmen to be more 'alert, active, and aggressive in presenting their economic interests' he favored. Hence he advocated a restriction of immigration, believed in a gradual reduction of hours of labor, opposed trusts, . . . There were three things which aroused President Walker to sharp speech: shallow philosophy, a suggestion of non-fulfillment of obligations, or confiscation, and any attack upon law and order." His relation to monetary science was an important one. He framed a definition of "money" which was adopted by the "Encyclopædia Britannica," and insisted that irredeemable bank paper, of whose inexpediency he had the deepest conviction, should, nevertheless, be included under that term. He introduced the expression "common denominator in exchange," as a substitute for the phrase, "measure of value," and followed his father in opposing the "banking school," which held that a body of money composed of bank-notes and coin behaves precisely like a body of coin alone. General Walker is, perhaps, best known, however, as a bimetallist. His position on this question has always been clear, and consistent. From his speech in the Paris Conference of 1878, for the whole of his career he held that the demonetization of silver was a cruel wrong. "Commerce and manufactures needed a common world's par of exchange. Monometallism was responsible for the friction cutting deep into the vitals of a beneficent world competition." He never appealed to national interests or class prejudices, but held that for all alike a contracting money medium was a serious evil. But with regard to methods he was most conservative. Although he believed the Acts of 1878 and 1890 to be the "outcome of genuine enthusiasm, in the main disinterested, in the main loyal," he considered them undiplomatic, injudicious, and practically mischievous. In the stormy campaign of last summer he preserved the same marvelous poise, and stood out as one of the very few men in the country who did not sacrifice their intellectual integrity or their moderation to the exigencies of the contest. His influence with the coming administration would surely have been a great one. During his connection with the Institute of Technology, President Walker published, besides his historical works, the "History of the Second Army Corps," the "Life of Gen. W. S. Hancock," and "The Making of the Nation;" four important works on economic science: "Political Economy," "Land and

Its Rent," "First Lessons in Political Economy," and "International Bimetallism." His speeches and pamphlets on various scientific and historical subjects were innumerable, and he delivered a course of lectures on the "United States as Seen in the Census," before the Lowell Institute in 1882, and a single lecture on the "Battle of Gettysburg" in 1886. General Walker's literary style was always remarkable; in argument he was singularly clear and convincing, and his perorations were often superb. His reputation as a scientific man was even greater abroad than in this country, and with the French economists he was peculiarly in touch. Professor Dewey remembers his surprise, as well as satisfaction, when some five years ago, in making a visit to Oxford, he attended the examinations of the undergraduates in Political Economy. It was at Commemoration time in June, and upon finding that these examinations were going on, he obtained permission to attend. On entering the room he found three examiners seated behind a long table, and students one by one being orally examined, each for a space of some fifteen minutes. The text-book in which they were being examined was President Walker's Political Economy.

But it was not President Walker the economist, or General Walker the soldier, or Professor Walker the statistician, whom the students of the Institute of Technology knew and loved, and whom they greeted with cheers whenever he appeared upon the platform of Huntington Hall. It was his strong and perfect character that exercised such a magnetic power over all of us who came under his influence. We heard his too-rare lectures,-enhanced by no oratorical arts of delivery, but in themselves fervid and direct, rounding to majestic periods. We caught the contagion of his tireless energy and love for honest work. We, as young men, were touched by his enthusiasm, his vigor, his marvelous dash and fire. We felt the genial influence of his courtesy, shown with the same indescribable grace to every one with whom he came in contact; for General Walker knew no distinctions of rank and class. We wondered at the modesty which made him speak always of the attitude of the Institute toward himself as something undeserved, incomprehensible. None of us ever came from a five-minute conversation with him without feeling more hopeful, more full of courage and resolve, for his optimism, his strong confidence, his faith in human nature. It may be, when the fruits of Francis Amasa Walker's labors in the many fields in which he was preeminent are gathered in, that the ideal and inspiration he furnished to thousands of young men will not prove the smallest portion of the harvest.

C.-E. A. W.





## THE GLASSES.

#### THE FRESH-MAN.

Why am I glad to be a man, A real-ly, tru-ly college man? Because they let me have a gun, And chem-i-cals and lots of fun: That's why I like to be a man, A col-lege man.

#### THE SOPHOMORE.

Why do I like the Institute?
Why, sure, you must be easy fruit.
Wot t'ell, I like to smoke and drink,
And at the pretty girls to wink,
That's why I like — you big galoot —
The Institute.

#### THE JUNIOR.

Why am I fond of M. I. T.?

Because of all it means to me;

Many an honor, many a prize,

To win me favor in her eyes,

Whose smile brings happiness to me

At M. I. T.

#### THE SENIOR.

Why do I love Technology?

And bear each daily task with glee?

Because when some two months are done I hope to compass piles of mun;

A good investment thou wilt be,

Technology.



Jean Mother: like Jech just as much as ever. Ithink I wrote you in my last about Mr Linus, the man with the black beard who teaches drawing and sells instruments (by the way I should like some more dough my room-mate says that means money because I spent almost all I had for those instruments and some books at Mr which were awful expensive, on account of the pictures Suppose), and the Bird who is really a very nice old lady, if she is treated respectfully. Mr. Pope who teaches Chemistry Ido not like at all, because he gave me an Fin other day. get him to telling him tried hard to we were told to stop then He asked me what course I was taking, and when I said Course IV, he shook his head and said he could not change the mark. Idon't see what that had to do with it. ( ! Cuture of Mr. John).

Olike to drill very much and hohe to become a corporal But I do not wear my unisom on other days than the regular drill day (because) there is a man called the Lounger a column in the Oeth mostly a bout Freshmen says the proper thing to do. way Slook when Jam dulling only I put the epaulettes on. this puture ( I showed truly guns. to Mr. adams and he said I ought to be on Technique) Jur class is doing very well in track athletics a man nached Suter who has long whitish hair and looks very he-Culiar, was first in one of the runs in the fall meet and Hall was another Hall was chairman of our class for a while & is mil though father conceited. He holds a great many offices in various organizations and is very public spirited Athink through our first meetings very quetly with the help of some juniors We elected of ficers by the Australian ballot and Sdrove off Some Sophe who tried to said the folls. He practically won the canecounted there were runetien of each class.

One of the events of the rush was the capture of the 199 flag some jumors helped a bound named Durgin to climb up the pole, and he cut the flag down in the very face of the enemy. I think our class is very fine and will be celebrated before it graduates.

Of Meshman

Of Shave been elected a member of the Y. Me. G. A. Son't that ruce!



# Hotel Plaza Columbus Avenue Boston Mass

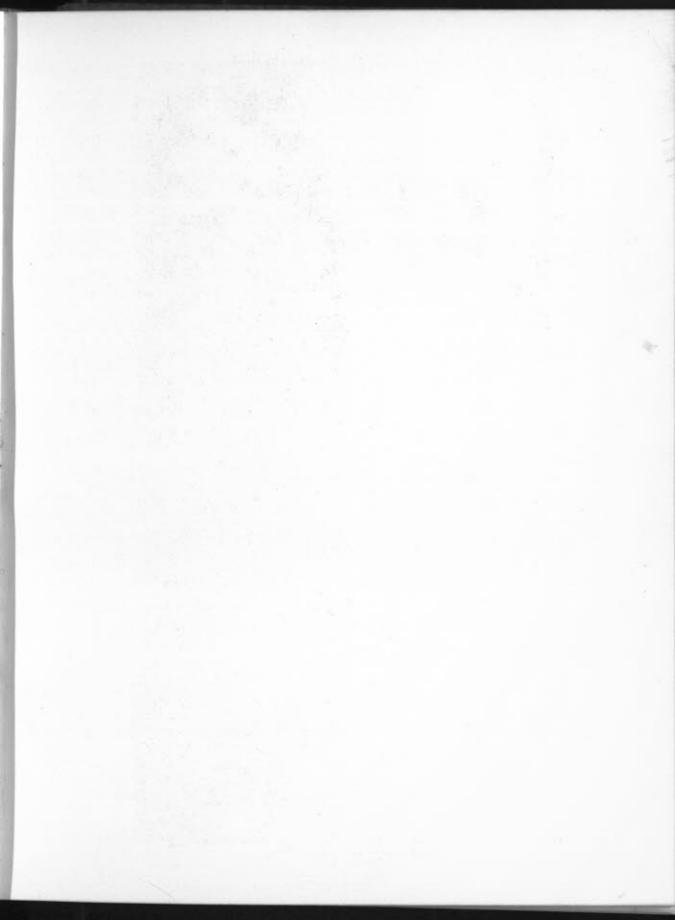
Dear Boh ..

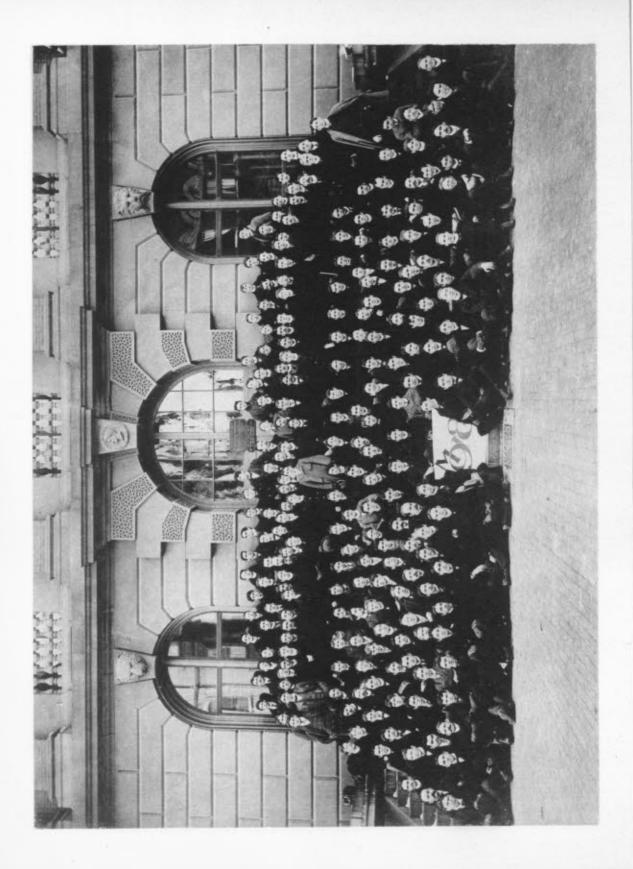
Jaught Where I have term awfully maked ranaus autaide things. Jow know '99 slouted in Dauguy lefe and has done so 'at our firs meetings on had some difficulties browne he 98 men lookes sommeh like frohuen, that me cauld not distinguish the new soon learned the ropes lowered and became as Quaining men as any in the Sustitute He had a corking fast hall ram which knocked the apats and of 98,

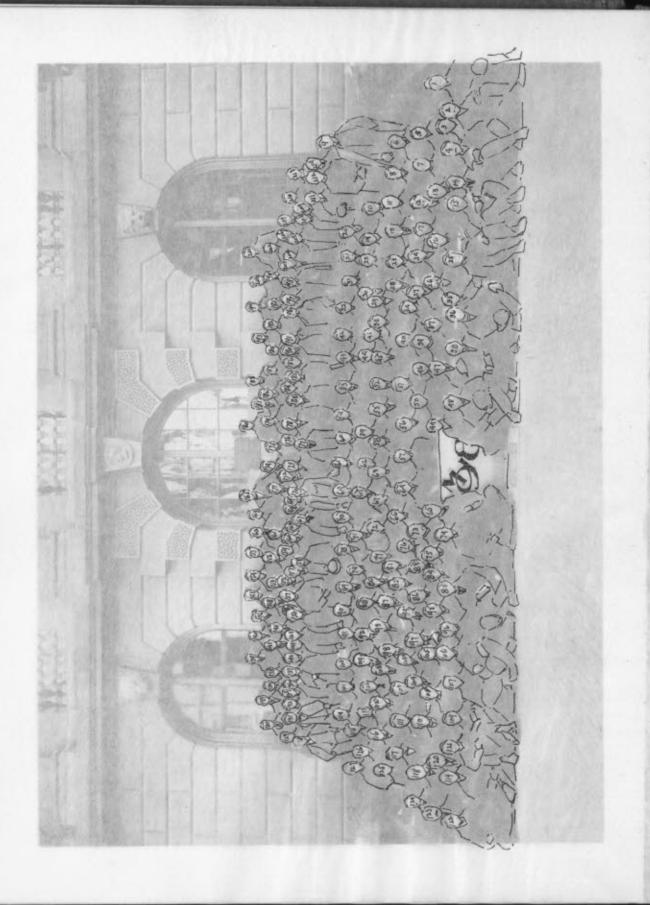
but we lost the care mak through nor understanding the rule. me had a very nice class denner exorbest several wen got drunk there will probably to even more This year. The great humph of wer Frahman carren, 1 however, me the Drill. A m her Brown handily was and aftermande I had toler all the buttons iffmy coar to give to some This year on come back. still mean modered are just and youthful joelety, I that is from some forty I had to mad for my Entrance exams) Physics so nother, but I ait as the Lack of the roam and cauld get a nice map,

if Charley Cross didn't keep himing the lights are and off English Lis I like because Botes tello Juny stones. Our four hall know of course nifed the ground much the poor Inchuer, and males mu the came-Mill mak - taugh it was close. It came out juin a tee, number hands to mueleen 3 In had a mich much Han rand election myter. m all must dawn to a must by might show at the Freaders of which is are of Boston's frues thea tres, better than enter the Harrand an the hyeum; and afternants on Jaught the Hamand men.

Do you suppose you could lend me len dollars? cause to all cause the old man has I were maky lately. Is I word to fuce his leg for chapel dues but when he found our what the Chapel was , he got up an his can Do send maney and oblige. Soph Q. more. P.S. I have just journed the







# KEY TO CLASS PHOTOGRAPH, - Names in Numerical Order.

185 Everett, 187 Hale. 188 Horton. 189 Huse. 190 Gladding. 191 Bodwell. 192 Loring. 194 Emery. 195 Trucker, A. H. 195 Minnig. 196 Minnig. 197 Wing., D.L., 198 Godley. 199 Trew. 199 Glading. 199 Fisher. 200 Fleming. 201 Fisher. 202 Gladinon. 203 Galison. 203 Galison. 203 Galison. 203 Galison. 204 Galison. 205 Galison. 205 Galison. 205 Galison. 206 Galison. 207 Galison. 208 Galison. 208 Galison. 208 Galison. 209 Fisher. 210 Spaulding. 211 Muhlig. 212 Shaulding. 213 Bissell.	
154 Streng, 155 Streng, 155 Smills, T. B., 156 Smills and 158 Koch. 158 Koch. 159 Goddard. 159 Goddard. 159 Goddard. 159 Goddard. 159 Marker, H. 150 Twombly. 170 Twombly. 170 Twombly. 171 Newbury, 172 Faught. 173 Whitten. 174 Bishop. 175 Bishop. 175 Godbold. 175 Marker. 175 Godbold. 175 Godb	
123 Hutchinson, 124 Howard, 125 Fratt. 126 Loud, 127 Steffens, 128 Delano, 129 Schroeder, 130 Harris, 131 House, 131 House, 131 House, 131 House, 132 Brewster, 134 Johnson, P. F. 135 Dodge, I. B., 139 Surgent, 40 Nelson, 141 Packard, L. W., 142 Chare, A. M., 44 Davis, A. T., 44 Davis, A. T., 44 Davis, A. T., 44 Davis, A. T., 45 Doy, 141 Packard, L. W., 142 Chare, A. M., 143 Chae, A. M., 144 Davis, A. T., 145 Doy, 144 Davis, A. T., 145 Doy, 145 Doy, 146 Morrill, 147 Wessel, 149 Weiner, 150 Danforth, 151 Jones, F. H., 151 Coherr, 153 Cohurn, 153 Kellogg,	
94 Jones, F. A. 95 Forter, 96 Keene, 97 Torrey, 98 Blanchard, 99 Blanchard, 101 Goodrich, 103 A Larraboe, 103 A Larraboe, 104 Kendall, 105 Wright, 106 Wright, 107 Neidich, 108 Wright, 109 Wright, 100 Wright, 101 Hayden, F. L. 111 Hayden, F. L. 112 Milliken, 113 French, 114 Hayden, F. L. 115 Breach, 117 Babson, 117 Babson, 118 Sents, 119 Warren, 120 Dixon, C. S. 121 Dana, 122 Livenf,	
63 Mills, W. 64 Jones, H. W. 65 Mayer, 65 Chace, 67 Chace, 68 Scott 68 Scott 69 Davision, 77 Pease, 77 Stillings, 78 Stillings, 78 Stillings, 78 Stillings, 88 Lord, C. E. 82 Bram, 83 Jacoby, 84 Wantangton, 85 Hantangton, 85 Stillings, 86 Lord, C. E. 88 Cottle, 88 Stillings, 88 Cottle, 88 Stillings, 89 Stillings, 89 Stillings, 99 Stillin	
33 Blake. 34 Zimmenmann. 34 Zimmermann. 35 Tallmadge. 35 Ward. 35 Ward. 36 Mommers. 39 Smith, Granville de Clifford. 41 Wesson. 42 Campbell. 44 Priest. 45 Campbell. 44 Priest. 46 Davis, H. W., 46 Jack. 46 Jack. 47 Britschner. 48 Alland. 49 Lord, H. I. S. 40 Davis, H. W., 45 Alland. 49 Lord, H. I. S. 40 Davis, H. W., 51 Blackner. 52 Treat. 53 Philbrick. 54 Grosvenor. 55 Osgood. 56 Grosvenor. 57 Wadsworth. 58 Notte. 59 Hubbard. 59 Hubbard. 50 Dawes.	
1 Taylor, E. M. 2 De Golyer. 3 Haskell. 4 Anthony. 5 Collins. 5 Collins. 5 Morgan. 9 Rumery. 10 Karfman. 11 Fleet. 13 Tucker, A. W. 14 Colcord. 14 Tucker, A. W. 15 Strickland. 15 Strickland. 16 Strickland. 17 Sickman. 18 Haves 19 Wilder, R. E. 20 Tteig. 21 Lee. 22 Robinson. 23 Brown. 24 Ferguson. 25 Smith, G. L. 26 Winslow. 25 Smith, G. L. 26 Winslow. 26 Smith, C. F. 27 Grav. 28 Smith, C. F. 28 Smith, C. F. 29 Cleavefund. 31 Brower.	

# KEY TO CLASS PHOTOGRAPH.-Names in Alphabetical Order.

a Incoby.
ohnson, E.
Y
lones, F. H.
W.
e.
3
7 Long.
Lord, C. E.
.1.
3
Mansheld.
Marshall,
datthews.



Dear Ethel It does seem out of eight that Junior mrk, to which me have looked forward for nearly three years, our Junar mick is almost here. I can hardly realige that it is really so long it might be rabout a month des that first morning when he mandered about aimlessly in Rogers conider and got in enrybodies way and asked foolish ghestions about our attendance cards. Then I can remember the first rush my well the steam & and the heat and the fatal result Our first class deiner was I a success I recall my destructly. Toby's face Til you know Joby I thut,

as he made his celebrated speech about the class of Umpty ump, is me; and the dejected figure of wagon is another The only other event fun portance in that year with the exception of a few lettle matters like Chemistry and Descript, nos the drell. Stras not such a bulliant affair as last year's but or feat Harrard and that was a great thing Last year we more than reverged ourselves on 99 forthat we had suffered from 97, We raw their meetings and elected me our men secretary and there of our new on their constitution committee. In trouved there in the canerush and at baseball. On the cinder path in left enrything tehned us, he took the change

ion ship easily and this year or have um about four times as many pouls as all the other closses but together (see cut!) I don't like to crow and I wouldn't harryon thuck me boastful farany -. thing fut really I don't see how the Institute couldn't get along with out 28. To summange our triumphs; m han most of us passed trushmay Charistry many of us Physics and a fundustheat. In han surind three class dinners, he have elieted a lechnique board without unnecessay bloodshed. For the puture or shall sture our utwest that you may always to proud of the She and gray ribbon which you stell hope I mar for Hein 9. ate.



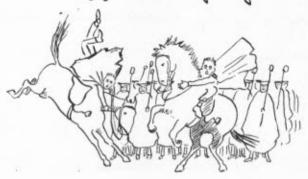
Technology Club, 71 Newburg Street.

my dear Eustis, you ask what I have done with myself during these form years. Well- Tech life is much the same, d'inagine, as in your time. on our fist year we struggled through the came-rush and chemistry with eqnal comfort and success. In foot-A COMMITTEE (yours truly scores a touchdown.)

ball lowever, we were victorious and our class dinner was a luge success Dining indeed has always proved (3) pours du our sophomore year 1/6 we trobe all records for attendance and general good fellowships We turned out well in the cause-rush this time also, in apite of our deplerable each of interest which worried tu lech so much In foot-ball and in base-ball we were invincible; and in our struggle with l'enjoice some of us developed great staying powers.

'95-96 was of course our halcyon season; and we proved ourselves, I think, a worthy funin class We have not scattered our energies by a too active interest in general dustitute against so that we had all the more for our special class enterprise Our Isolingue was very fine; and the affair got out by '98 this year will probably be a very inferior production. One of the pleasantest cases in the present reason of hand

grinding was the Republican parade. as Seniors we naturally with the affair language into one



own hands and hic Carting and Washburn were glorious rights as they chang to their prancing steeds some what discommoded by their long when.

in thesis work, all hoping to grad nate in June. Do you know of

anny good opening for an engineer in your town? I ewpe you will give mie a ligh if you

> yours. Truly, S. Eenyer

Please don't do any thing definite about a josition for me, because, you know, I may think best to take another year at lech

yours.

# GLASS GOLORS AND YELLS.

GLASS OF '97.

COLORS: Orange and Black.

YELL.

Tech! Rah! Rah! Tech! Boom! Bah! Ninety-seven! Ninety-seven! Rah! Rah! Rah!

GLASS OF '98.

COLORS: Blue and Gray.

YELL.

CLASS OF '99.

COLORS: Blue and Gold.

YELL.

Technology! Ninety-nine! Rah! Rah! Rah! Rah! Rah! Ninety-nine!

GLASS OF 1900.

COLORS: Crimson and Black.

YELL.

Boom, Rah! Boom, Rah! Boom, Rah! Ree! Nineteen Hundred! M. I. T.!



# GREEK-LETTER FRATERNITIES

AT THE

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

IN THE

ORDER OF THEIR ESTABLISHMENT.

# SIGMA QHI.

1855.	Gamma.	Ohio Wesleyan University				Delaware, Ohio.
1857.	Eta.					Oxford, Miss.
1858.						Bloomington, Ill.
1859.	Xi.					Greencastle, Ind.
1859.	Omicron.					Carlisle, Pa.
	Psi.	University of Virginia				Charlottesville, Va.
- 33	Alpha Chi.	University of Virginia Pennsylvania College				Gettysburg, Pa.
- 4	Theta.					Gettysburg, Pa.
		Bucknell University .				Lewisburg, Pa.
	Kappa.	Washington and Lee Unive				Lexington, Va.
1866.	Zeta.			7		Irvington, Ind.
					15	Granville, Ohio.
1867.		Denison University .	*			
1869.	Omega.	Northwestern University		*		Evanston, Ill.
		Hanover College .				Hanover, Ind.
1872.	Sigma Sigma.	Hampden-Sydney College		*		Hampden-Sydney, Va.
1874.		Randolph-Macon College				Ashland, Va.
1874.	Delta Delta.	Purdue University .				Lafayette, Ind.
	Zeta Zeta.			*		Danville, Ky.
	Zeta Psi.					Cincinnati, Ohio.
	Alpha Gamma.	Ohio State University		*		Columbus, Ohio.
1882.	Alpha Zeta.	Beloit College				Beloit, Wis.
1882.	Alpha Theta.	Mass. Institute of Technolo	gy			Boston, Mass.
1883.	Alpha Epsilon.					Lincoln, Neb.
1883.	Alpha Iota.	Illinois Wesleyan Universit	y			Bloomington, Ill.
	Alpha Lambda.	Wisconsin State University		8		Madison, Wis.
	Alpha Xi.	University of Kansas .				Lawrence, Kan.
1884.		University of Texas .		-		Austin, Texas.
	Alpha Omicron.	Tulane University .				New Orleans, La.
1886.	Alpha Pi.	Albion College			1	Albion, Mich.
	Alpha Beta.	University of California				Berkeley, Cal.
1886.	Alhpa Rho.	Lehigh University .				Bethlehem, Pa.
1888.	Alpha Sigma.					Minneapolis, Minn.
1889.	Alpha Tau.	University of North Carolin				Chapel Hill, N. C.
1889.	The state of the s	University of Southern Cal		nia		Los Angeles, Cal.
1890.	Alpha Phi.	Cornell University .		7		Ithaca, N. Y.
1892.	Alpha Psi.	Vanderbilt University	6	8		Nashville, Tenn.
1892.	Alpha Omega.	Leland Stanford, Jr., Unive	ersit	w	700	Menlo Park, Cal.
1893.	Eta Eta.		,			Hanover, N. H.
1893.						Oxford, Ohio.
	Alpha.		-			Geneva, N. Y.
1893.					1	201
10.00	Kappa Kappa.					
1894.		Kentucky State College				Lexington, Ky.
	Nu Nu.	Columbia College .				New York City, N. Y.
	Epsilon.	Columbian University				
	Mu Mu.	West Virginia University		÷.		
	Tau.	Roanoke College .	*	3.5		Salem, Va.
	Phi Phi.	University of Pennsylvania		-		Philadelphia, Pa.
1896.		Missouri State University		1		Columbia, Mo.
1897.		University of Chicago				Chicago, Ill.

# SIGMA GHI.

# ALPHA THETA CHAPTER.

Established March 22, 1882.

### MEMBERS.

DICKSON QUEEN BROWN.
STEPHEN PEARSON BROWN.
WILLIAM RAWSON COLLIER.
WILLIAM BARLOW DWIGHT.
FINLAY FORBES FERGUSON.
WILLIAM HENRY FOX.
ALBERT WEBSTER GRAY.
JAMES THOMAS HARAHAN, JR.
BARTON HASELTON.
LEWIS ANDREWS HAYDEN.
WILLIAM ABBOTT HAZARD.

EDWARD RUDOLPH HEISELER.
ROBERT GRANT HOLABIRD.
HARRY BURLEIGH HUNT.
GUY MAGEE, JR.
CHARLES BODWELL PAINE.
JOHN SHELLEY PECHIN.
JAMES FRANCIS SICKMAN.
LUCIUS SPAULDING TYLER.
FRANK ALBERT WERNER.
ERNEST WOODYATT.
WALTER GUSTAVE ZIMMERMANN.

# Frater in Collegio.

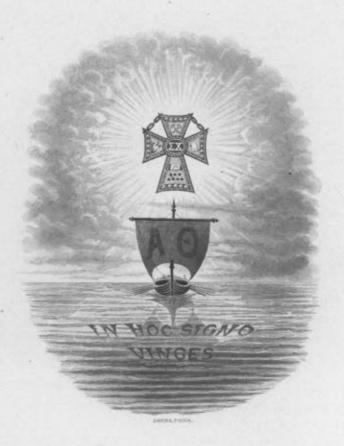
ARTHUR ALBERT JOHNSON.

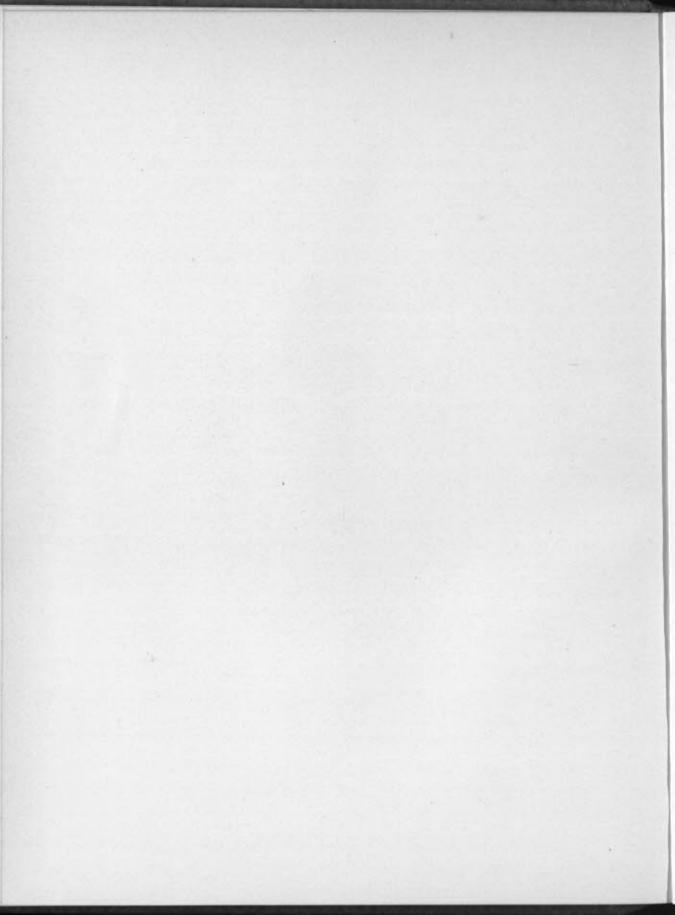
### Fratres in Urbe.

HERBERT TYLER BARDWELL.
JOHN ANDREW CURTIN.
WILLIAM WORCESTER CUTLER.
JOHN ASHLEY HIGHLANDS.

CHARLES EASTMAN LOCKWOOD.
RHODES GREENE LOCKWOOD.
CHARLES LATHAM NUTTER.
FARLEY OSGOOD.

FRANK LIVERMORE PIERCE.





# Тнета Хі.

Α.	Rensselaer Polytechnic Institute .				Troy, N. Y.
B.	Yale College		4.0		New Haven, Conn.
Γ.	Stevens Institute of Technology .			83	Hoboken, N. J.
$\Delta$ .	Massachusetts Institute of Technology				Boston, Mass.

# Тнета XI.

# DELTA CHAPTER.

## MEMBERS.

HENRY KIMBERLY BABCOCK.

JOSEPH BANCROFT.

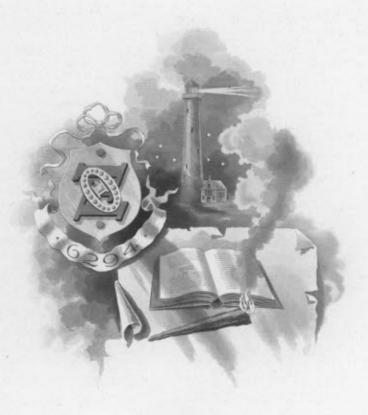
GEORGE EDWIN BERGSTROM.

ALBERT LAWRENCE CHURCHMAN.
FRANKLIN WHITNEY DOLIBER.

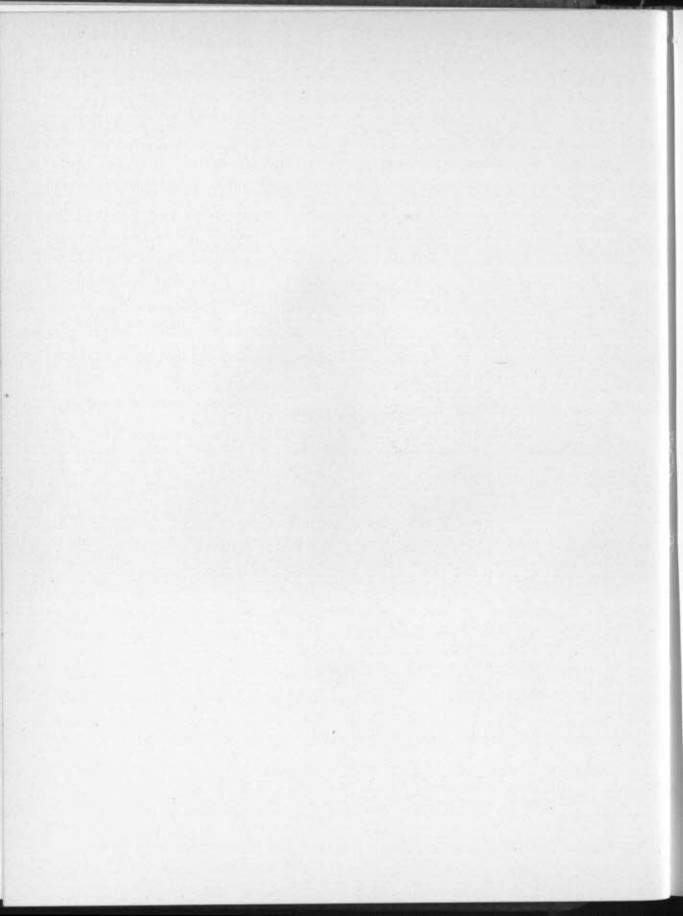
ARTHUR LITTLE HAMILTON.

RICHARD STANLEY HOWLAND.

EDWARD JOHNSON, JR.
TIMOTHY WRIGHT HOXIE.
WILLIAM ABBOT KINSMAN.
RALPH ROLLINS RUMERY.
PEDRO SANCHEZ Y BATISTA.
EDWIN RUTHVEN SHEAK.
EDWARD STUTEVANT.



Denkin, Jöhrön



# DELTA PSI.

A.	Columbia College						25	New York City.
$\Delta$ .	University of Pennsylvania			4			٠,	Philadelphia, Pa.
	Trinity College							Hartford, Conn.
Λ.	Williams College	,		,		4.5		Williamstown, Mass
Φ.	University of Mississippi				100			Oxford, Miss.
Y.	University of Virginia .					+31		Charlottesville, Va.
Σ.	Sheffield Scientific School				-			New Haven, Conn.
T.	Massachusetts Institute of To	echn	ology					Boston, Mass.

# DELTA PSI.

# TAU CHAPTER.

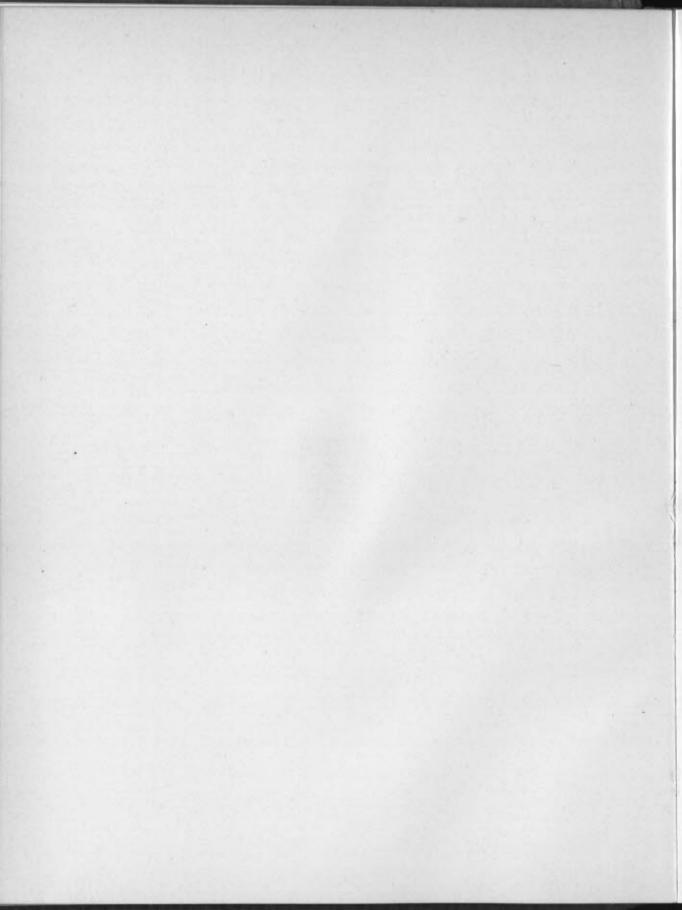
### MEMBERS.

HENRY WALTER ALLEN.
WILFRED BANCROFT.
EDWARD PIERREPONT BECKWITH.
JOHN STEARNS BLEECKER.
ROBERT FRAZIER, JR.
BERTRAM WILLIAM BATCHELDER GREENE.
JOHN PARKER ILSLEY, JR.
SAMUEL FOSDICK JONES.
HENRY GRANT MORSE, JR.

Walter Page.
William Thornton Parker, Jr.
Ralph Plumb.
Edward Bridge Richardson.
George Avery Robinson.
Albert Loring Swasey.
Lewis Stewart.
Roland Williams Stebbins.
George Stanton Tiffany.



Since.



# **С**ні Рні.

A.	University of Virginia				100	Charlottesville, Va.
В.	Massachusetts Institute of Technological	ogy				Boston, Mass.
Γ.	Emory College					Oxford, Ga.
$\Delta$ .	Rutgers College					New Brunswick, N. J.
E.	Hampden-Sydney College					Hampden-Sydney, Va.
Z.	Franklin and Marshall College					Lancaster, Pa.
H.	University of Georgia					Athens, Ga.
θ.	Rensselaer Polytechnic Institute		8			Troy, N. Y.
I.	Ohio State University			4		Columbus, Ohio.
Λ.	University of California					Berkeley, Cal.
М.	Stevens Institute of Technology		2			Hoboken, N. J.
N.	University of Texas					Austin, Tex.
Ξ.	Cornell University					Ithaca, N. Y.
0.	Sheffield Scientific School, Yale Co	olleg	e			New Haven, Conn.
П.	Vanderbilt University					Nashville, Tenn.
P.	Lafayette College					Easton, Pa.
Σ.	Wofford College					Spartanburg, S. C.
T.	College of South Carolina				×	Columbia, S. C.
φ.	Amherst College					Amherst, Mass.
$\Psi$ .	Lehigh University			34		South Bethlehem, Pa.

# Сы Ры.

# BETA CHAPTER.

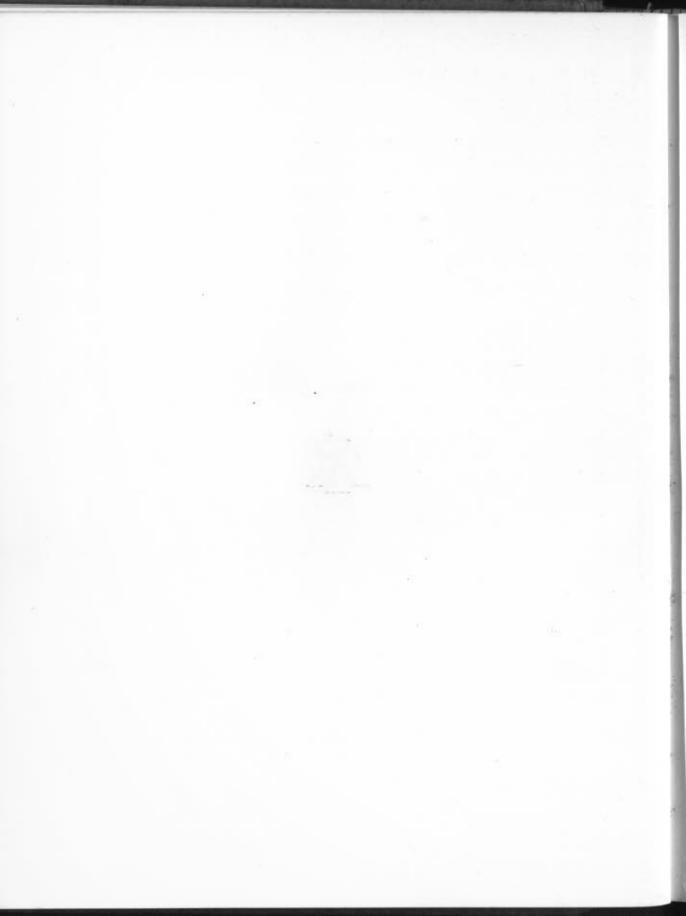
### MEMBERS.

WILLIAM HARVEY BARLOW.
WILLIAM DANIELS BLACKMER.
CHARLES CALVIN BRIGGS.
GEORGE WINSLOW BROWN.
WILLIAM CURRY.
SAMUEL BASS ELBERT.
WILLIAM ALECK FAXON.
RUSSELL HENRY GLOVER.
JOHN MITCHELL HIGGINS.

AELXANDER RIEMAN HOLLIDAY.
CARLETON SPAYTH KOCH.
FREDERIC ICKES MERRICK.
RICHARD MOMMERS.
HOWARD AGNEW NOBLE.
GEORGE OTTO SCHNELLER.
CARL SCHUTTLER.
HENRY WELLES TUBBS.
GEORGE FREDERICK ULMER.

HERBERT IVORY LORD.





# **Децта** Қарра Құрысом.

Phi.	Yale University .	×				*5	*				1844
Theta.	Bowdoin College								04		1844
Xi.	Colby University		-			1				100	1845
Sigma.	Amherst College				100	4				1	1846
Gamma.	Vanderbilt University				3.43	10					1847
Psi.	University of Alabama	1			4				0		1847
Upsilon.	Brown University	2	-	-	10		V				1850
Chi.	University of Mississi	ppi	12	-	120						1850
Beta.	University of North (	Caro	lina								1851
Eta.	University of Virginia	1									1852
Kappa.	Miami University										1852
Lambda.	Kenyon College .										1852
Pi.	Dartmouth College						4:				1853
Iota.	Central University of	Kei	ntuck	y							1854
Alpha Alpha.	Middlebury College										1854
Omicron.	University of Michiga	n									1855
Epsilon.	Williams College										1855
Rho.	Lafayette College										1855
Tau.	Hamilton College				34	143				1.	1856
Mu.	Colgate University					200					1856
Nu.	College of the City of	Ne	w Ye	ork						120	1856
Beta Phi.	University of Rochest	er	1	12						1	1856
Phi Chi.	Rutgers College .		-								1861
Psi Phi.	De Pauw University										1866
Gamma Phi.	Wesleyan University							-		0.007	1867
Psi Omega.	Rensselaer Polytechni	С								7.41	1867
Beta Chi.	Adelbert College .										1868
Delta Chi.	Cornell University										1870
Delta Delta.	Chicago University										1870
Phi Gamma.	Syracuse University										1871
Gamma Beta.	Columbia College			50							1874
Theta Zeta.	University of Californ	ia		1.5			2.5			1520	1876
Alpha Chi.	Trinity College .					-			30		1879
Phi Epsilon.	University of Minneso	ota		12	8.					100	1889
Slama Tou	Massachusetta Institut		r Tran	L. I			1			194	.0

# DELTA KAPPA EPSILON.

# SIGMA TAU CHAPTER.

### Fratres in Facultate.

FRANCIS AMASA WALKER.\*

ALFRED EDGAR BURTON.

### MEMBERS.

KENNETH MALLON BLAKE.
GEORGE BURNHAM.
WILLIAM HENRY CUTLER.
HOWELL FISHER.
STANLEY GAY HYDE FITCH.
GEORGE MCMURTRIE GODLEY.
OSWALD CONSTANTIN HERING.
HENRY FORD HOIT.
WALTER HUMPHREYS
HARRY CREIGHTON INGALLS.
ALLAN WINCHESTER JACKSON.

ALBERT VOLTAIRE MÖLLER.
WORTHINGTON PALMER.
WILLIAM CHAPMAN POTTER.
LOUIS JEROME RICHARDS.
ARGYLE EGGLESTON ROBINSON.
WILLIAM OTIS SAWTELLE.
HAVEN SAWYER.
WILLIAM HENRY TEW.
MAURICE DE KAY THOMPSON, JR.
THURLOW WASHBURN.
DAVID LA FOREST WING.

# Frater in Collegio.

JAMES SWETT SMYSER.

## Fratres in Urbe.

FREDERICK CHAMBERS BLANCHARD.
HARRY PUMPHREY CODDINGTON.
ARTHUR GEORGE FARWELL.
WILLIAM STUART FORBES.
GAYLE TILTON FORBUSH.

ARTHUR EDWIN FOWLE.
ISAAC BREWSTER HAZELTON.
CHARLES GILMAN HYDE.
LEONARD METCALF.
HARRY ORLANDO MARCY, JR.

RALPH SPELMAN WHITING.









# PHI BETA EPSILON.

Founded 1890.

LOCAL AT TECHNOLOGY.

# PHI BETH EPSILON.

#### MEMBERS.

GEORGE RUTHERFORD ANTHONY.
HERBERT PAGE BEERS.
ROBERT SEELEY DE GOLYER.
IRÉNÉE DU PONT.
FRANK WARREN ÉVERETT.
MALCOLM FAULKNER ÉWEN.
FREDERICK CROMWELL FIELD.
GEORGE ISAAC FISKE.
FREDERIC WILLIAM FULLER.
GEORGE ARTHUR FULLER.
DU RELLE GAGE.
DAVID ÉDGERTON GRAY.
EDWARD HOSMER HAMMOND.

SHELDON LEAVITT HOWARD.
BENJAMIN HURD.
HARRY GEORGE JOHNSON.
FREDERICK CLELAND LINDSLEY.
HARRY BORDEN NEWHALL.
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GERALD BASIL STREET.
THOMAS EDDY TALLMADGE.
EDWARD MOLINEUX TAYLOR.
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WILLIAM EATON WEST.
RAYMOND SMITH WILLIS.

#### Fratres in Urbe.

CHARLES WILSON AIKEN.
AZEL AMES, 3d.
STEPHEN BOWEN.
HENRY ANTHONY FISKE.
SUMNER HATHERLY FOSTER.
ANDREW DANIEL FULLER.
EDWARD HALEY HUXLEY.
FRANK WILLIAM LOVEJOY.

RAYMOND BEACH PRICE.

GEORGE WHITEFIELD FAY REED.

GEORGE FREDERICK SHEPARD.

GEORGE WILMARTH SHERMAN.

ALBERT HUBBARD SPAHR.

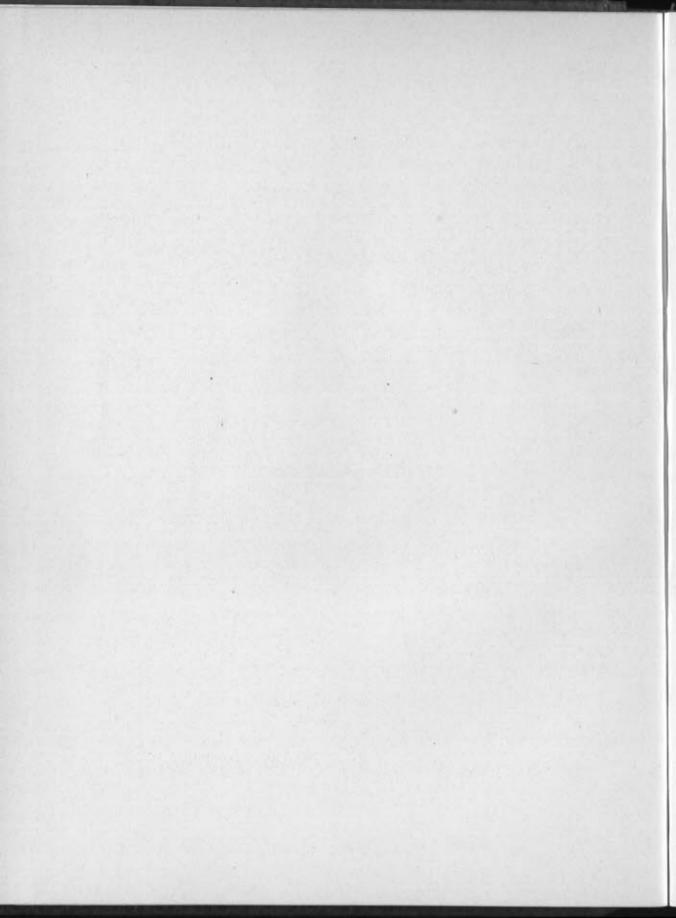
WALTER MULLIKEN STEARNS.

JOHN GIFFORD THOMPSON.

CHARLES NELSON WRIGHTINGTON.



Direktor, Filtela



# DELTA UPSILON.

Founded at Williams College, 1834.

## CHAPTER ROLL.

1834.	Williams .										Williamstown, Mass.
1838.	Union .										Schenectady, N. Y.
1847.	Hamilton .								-		Clinton, N. Y.
1847.	Amherst .										Amherst, Mass.
1847.	Adelbert .	,									Cleveland, Ohio.
1852.	Colby .				100						Waterville, Me.
1852.	Rochester										Rochester, N. Y.
1856.	Middlebury										Middlebury, Vt.
1857.	Bowdoin										Brunswick, Me.
1858.	D										New Brunswick, N. J.
1860.											Providence, R. I.
1865.	0.1										Hamilton, N. Y.
1865.	New York										New York City.
1869.	Cornell										Ithaca, N. Y.
1870.	Marietta										Marietta, Ohio.
1873.	Syracuse					73					Syracuse, N. Y.
1876.	Michigan .										Ann Arbor, Mich.
1880.	Northweste			-			150				Evanston, Ill.
1880.	Harvard				- 10			30			Cambridge, Mass.
1885.	Wisconsin						100				Madison, Wis.
1885.	Lafayette										Easton, Pa.
1885.	Columbia		9	***				**			New York City.
1885.			•	. 19			0.00				South Bethlehem, Pa.
1886.	Tufts .										West Somerville, Mass.
1887.	De Pauw							*			Greencastle, Ind.
1888.	Pennsylvan										Philadelphia, Pa.
1890.	Minnesota	146				-					Minneapolis, Minn.
1891.	Technology										Boston, Mass.
	Swathmore										Swathmore, Pa.
1894.	California		•	*		17					Berkeley, Cal.
1895.	Leland Sta				-	3.5	-	*	5		Palo Alto, Cal.
1895.	Leiand Sta	more	, J1		. +		***	9.5		1.3	Paio Aito, Cal.

## DELTA UPSILON.

## TECHNOLOGY CHAPTER.

#### Frater in Facultate.

FRANK VOGEL.

#### MEMBERS.

HUNTLY WARD DAVIS.
ALFRED KIMBALL DOWNES,
WILLIAM WISE EATON.
WILLIAM BALDWIN HOUGH.
ETHAN HENRY HOWARD.
BASSETT JONES, JR.
SULLIVAN WILLIAMS JONES.
FREDERIC NELSON LE BARON.

MILES STANDISH RICHMOND.
GRANVILLE SMITH.
JACOB STONE, JR.
WILLIAM RANDOLPH STRICKLAND.
GEORGE RICHARDS TOWNSEND.
GEORGE REED WADSWORTH.
ROBERT BRUCE WALLACE.
WARD WELLINGTON WARD.

THOMAS ROTE WEYMOUTH.

#### Fratres in Urbe.

Joshua Atwood, 3d.

Louis Derr.

Albert Lincoln Kendall.

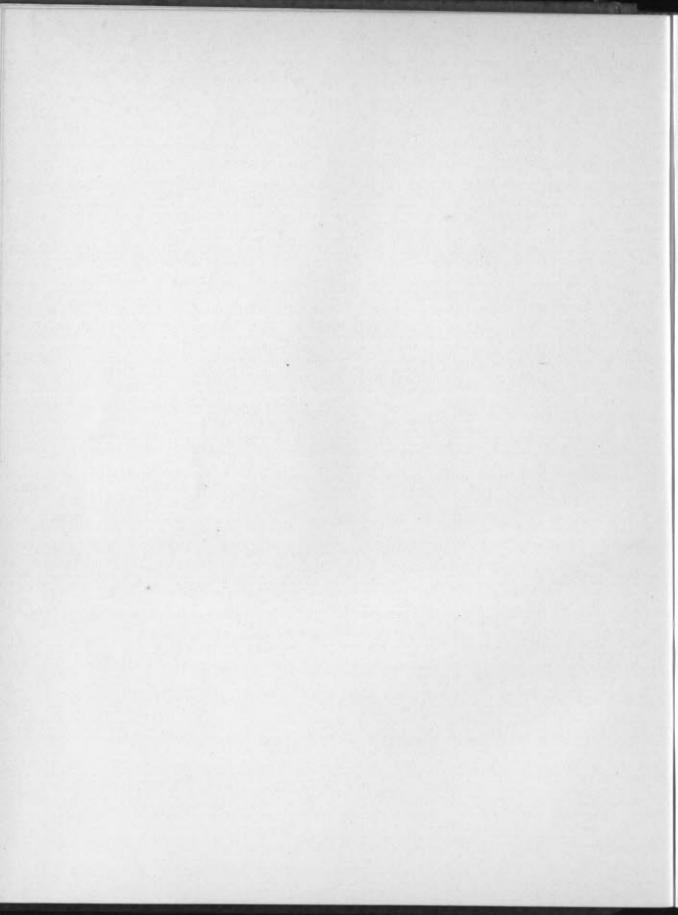
Willis Taylor Knowlton.

Maurice Le Bosquet.

WALTER ELBRIDGE PIPER.
THOMAS GLEASON RICHARDS.
FRANK CUMMINGS SHEPARD.
ALFRED BALL TENNEY.
ALFRED EDWARD ZAPF.



Trreka Phila.



# SIGMA ALPHA RPSILON.

Founded in 1856, at Alabama State University, Tuscaloosa, Alabama.

#### CHAPTER ROLL.

Mass. Beta Upsilon.
Mass. Iota Tau.
Mass. Gamma.
Mass. Delta.
Conn. Alpha. N. Y. Mu. N. Y. Sigma Phi.
N. Y. Mu.
N. Y. Sigma Phi.
Penn. Omega.
Penn. Sigma Phi.
Penn. Alpha Zeta.
Penn. Zeta.
Va. Omicron.
Va. Sigma.
N. C. Xi. N. C. Theta, S. C. Delta, S. C. Phi. S. C. Gamma.
N. C. Theta.
S. C. Delta.
S. C. Phi.
S. C. Gamma.
Ga. Beta.
Ga. Psi.
Ga. Beta. Ga. Psi. Ga. Epsilon.
Ga. Phi.
Mich. Iota Beta.
Mich. Alpha.
Ohio Sigma.
Ohio Delta
Ohio Delta. Ohio Epsilon.
Ohio Theta.
Ind Aluba
Ind. Alpha.
Ind. Beta.
Ill. Psi Omega.
Ky. Kappa.
Ky. Iota.
Tenn. Zeta.
Tenn. Lambda. Tenn. Nu. Tenn. Kappa. Tenn. Omega. Tenn. Eta.
Tenn. Nu.
Tenn. Kappa.
Tenn. Omega.
Tenn, Eta.
Ala, Mu,
Ala. Iota.
Ala. Alpha Mu.
Miss. Gamma.
Iowa Sigma.
Mo Aloho
Mo. Alpha.
Mo. Beta.
Neb. Lambda Pi.
Ark. Alpha Upsilon. Tex. Rho. Col. Chi.
iex. Kho.
Col. Chi.
Col. Zeta.
Cal. Alpha.
Cal. Beta.

CHAILER	ROLL		
Boston University .			
Massachusetts Institut	e of Tec	hnol	non
Harvard University .	ic of rec	miloi	08,
Worcester Polytechnie	. Inotitu	10	*
Trinity College	Linstitu	te	*
Columbia University		*	
St. Stephen's College			
	3.00	1	1
Allegheny College .			
Dickinson College .			
Pennsylvania State C	onege		3
Bucknell University .			
University of Virginia	a .		
Washington and Lee	Univers	ity	
University of North (	Carolina	4	
Davidson College .			100
South Carolina Colle	ge .	*	
Furman University .			
Wofford College .			200
University of Georgia			4
Mercer University .		-	
Emory College			
Georgia School of Te	chnolog	y	
University of Michiga	in .		
Adrian College			-
Mt. Union College .			
Ohio Wesleyan Unive	rsity		
University of Cincing			
Ohio State University			1
Franklin College .			
Perdue University .		1	- 0.
Northwestern Univers	ity .		
Central University .			
Bethel College			-
Southwestern Presbyt	erian II	niver	city
Cumberland Universi		iii v Ci	BIL.
Vanderbilt University			
University of Tennes			. 65
University of the Sou	th.	*	
Southwestern Bantist	Univers	14	
Southwestern Baptist University of Alabam	Univers	ity	*
Court on The court	a .	*	
Southern University .	T	1	*
Alabama Polytechnic	Institute		
University of Mississ	ippi .	*	
Simpson College .			2
University of Missour			
Washington Universi	ty .		
University of Nebrash University of Arkans	sa .	× .	
University of Arkans	as .	40	
University of Texas .			
University of Colorac	0 .	*	4
Denver University .			
Leland Stanford, Jr.,	Universi	ity	
University of Californ	nia.	1.50	

Boston, Mass. Boston, Mass. Cambridge, Mass. Worcester, Mass. Hartford, Conn. New York, N. Y. Annandale, N. Y. Meadville, Pa. Carlisle, Pa. State College, Pa. Lewisbury, Pa. Charlottesville, Va. Lexington, Va. Chapel Hill, N. C. Davidson, N. C. Columbia, S. C. Greenville, S. C. Spartanburg, S. C. Athens, Ga. Macon, Ga. Oxford, Ga. Atlanta, Ga. Ann Arbor, Mich. Adrian, Mich. Alliance, Ohio. Delaware, Ohio. Cincinnati, Ohio. Columbus, Ohio. Franklin, Ind. Lafavette, Ind. Evansville, Ill. Richmond, Ky. Russellville, Ky. Clarksville, Tenn. Lebanon, Tenn. Nashville, Tenn. Knoxville, Tenn. Sewanee, Tenn. Jackson, Tenn. Tuscaloosa, Ala. Greenboro, Ala. Auburn, Ala. Oxford, Miss. Indianola, Iowa. Columbia, Mo. St. Louis, Mo. Lincoln, Neb. Fayetteville, Ark. Austin, Tex. Boulder, Col. Denver, Col. Palo Alto, Cal. Berkeley, Cal.

University of California .

# SIGMA ALPHA RPSILON.

## MASSACHUSETTS IOTA TAU CHAPTER.

#### MEMBERS.

WILLIAM RUSSELL ALLEN.
JONATHAN BARTLEY BRENNEMANN.
CARDELLA DRAKE BROWN.
HOWARD HENRY BURDICK.
WALTER MEIGGS BUSH.
LUZERNE SIMEON COWLES.
HOWARD BROWNING COLLINS.
CHARLES SPENCER CRANE.
CHESTER FRANCIS DRAKE.
JOHN WALLIS FLEET.

CHARLES MUSSEY FOSDICK.

ELMER LOUIS GERBER.

ALEXANDER GILCHRIST HAWES. IR.
JOHN HASTINGS HOWLAND.

HARRINGTON MACK.

CARL LEON MORGAN.

CHARLES EDWARD MORTON.

CHARLES FRANKLIN SMITH.

WILLIAM DEERING STAPLES.

JAMES ALEXANDER STETSON.

CHARLES HERBERT SWEETSER.

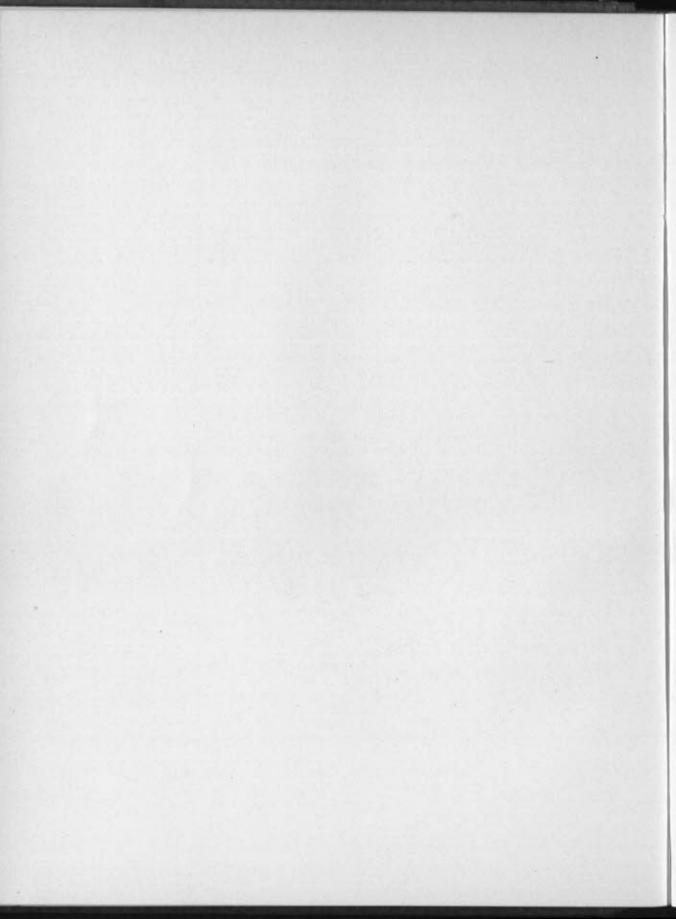
#### Fratres in Urbe.

ALBERT RICHARD BEDDALL.
WALLACE CLARK BRACKETT.
HOWARD CHASE BUCKMINSTER.
HERBERT NATHAN DAWES.
WILLIAM NATHAN CROSBY.
RUSSELL SAMUEL BUCHER.

FRANK BIRD MASTERS.
RICHARD HENRY PARKER, JR.
WALTER ROBERT PHEMEISTER.
JOHN DE LOSS UNDERWOOD.
WINSLOW ABBOTT WILSON.
HERMAN HORMEL.



Draka Bula



# **Делта** Таи **Делта**.

Founded at Bethany College, January 1, 1860.

## CHAPTER ROLL.

				5000		MARCH 1	275			
			Div	ision	of th	ne So	uth.			
	Λ.	Vanderbilt University								Nashville, Tenn.
	П.	University of Mississippi								Oxford, Miss.
В.	Δ.	University of Georgia								Athens, Ga.
B.	E.									Oxford, Ga.
В.	θ.	University of the South								Sewanee, Tenn.
B.	I.	University of Virginia								Charlottesville, Va.
В.	Ξ.	Tulane University .								New Orleans, La.
			Di	rision		. w	7			
	0.	University of Iowa .								Iowa City, Iowa.
R	г.	University of Wisconsin								Madison, Wis.
	H.	University of Minnesota	100							Minneapolis, Minn.
097.0	K.	University of Colorado								Boulder, Col.
	П.	Northwestern University								Evanston, Ill.
	P.	Leland Stanford, Jr., Un								Palo Alto, Cal.
0.000	T.	University of Nebraska								Lincoln, Neb.
	Υ.									Champaign, Ill.
D.	4.	Chiversity of Thinois						*		Champangu, xiii
				ision						
	В.	Ohio University .				-		*		Athens, Ohio.
	$\Delta$ .	University of Michigan								Ann Arbor, Mich.
	E.	Albion College .					0.60	*		Albion, Mich.
	Z.	Adelbert College .								Cleveland, Ohio.
	I.	Michigan Agricultural C	olleg	ge						Ag'l College, Mich.
	K.	Hillsdale College .					120	4.		Hillsdale, Mich.
	M.	Ohio Wesleyan Universi	ty	*				100		Delaware, Ohio.
	X.	Kenyon College .		. 10						Gambien, Ohio.
B.	A.	Indiana University .		1	1					Bloomington, Ind.
В.	В.	De Pauw University						¥1	4	Greencastle, Ind.
В.	Z.	Butler University .						90		Indianapolis, Ind.
B.	$\Psi$ .	Wabash College .								Crawfordsville, Ind.
В.	Φ.	Ohio State University		-						Columbus, Ohio.
		CONTRACTOR OF STATE	Di	vision	of	he F	ast.			
	Α.	Allegheny College .	0.700					- 2	12	Meadville, Pa.
	Γ,	Washington and Jefferso						0		Washington, Pa.
	P.	Stevens Institute of Tech								Hoboken, N. J.
	Σ.	Williams College .			. 1					Williamstown, Mass.
	T.	Franklin and Marshall C							ं	Lancaster, Pa.
										Troy, N. Y.
	T.	Rensselaer Polytechnic I				*				S. Bethlehem, Pa.
	Α.	Lehigh University .					*			College Hill, Mass.
	M.	Tufts College							-	Boston, Mass.
	N.	Massachusetts Institute								
В.	0.	Cornell University .				1.0				Ithaca, N. Y.

# **Делта** Таи **Делта**.

## BETA NU CHAPTER.

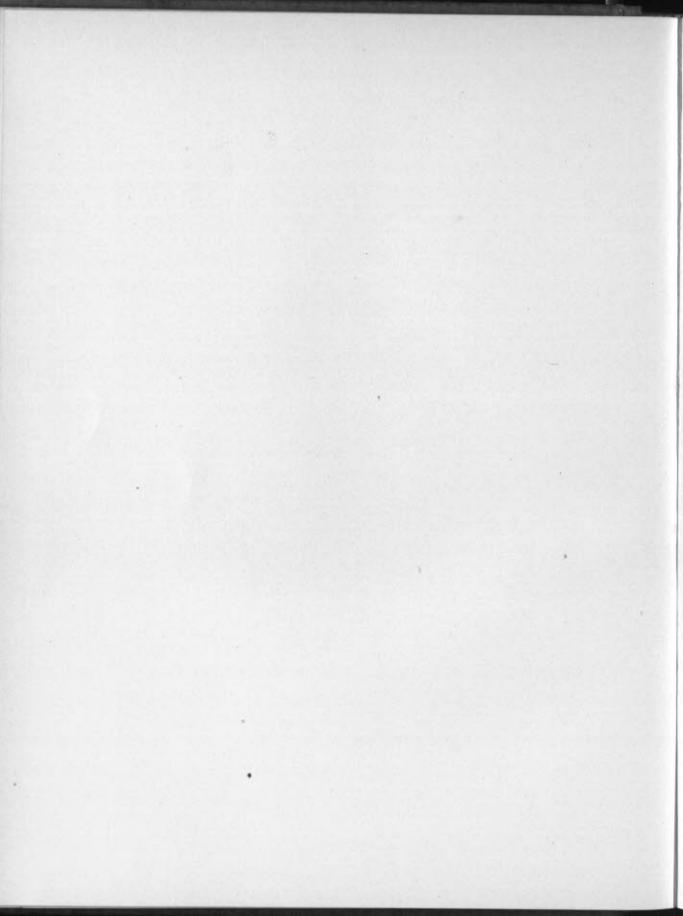
#### MEMBERS.

WILLIAM JACKSON ANGUS.
FRANCIS MINOT BLAKE.
WILLIAM DEWEY BRADLEY.
DONALD CHENERY CAMPBELL.
HERBERT WILLIAM CHAMBERLIN.
PHILIP BENSON COOPER.
ALFRED STARR HAMILTON.

EDWARD LOWTHER HOLMES.
AUGUSTUS CLARK LAMB.
CLIFFORD MILTON LEONARD.
THOMAS NESMITH, JR.
MARSHALL FRANCIS OLIVER.
JESSE WYMAN SHUMAN.
MONTFORT HILL SMITH.



Dreina, Phila.





## ALPHA DELTA PHI.

WARREN DAY BROWN .		0.00				-			12	Amherst.
DAVID DEMOREST CASSIDY	14		2			100	100			Harvard.
Aurin Moody Chase .	-			. 1	-					Amherst.
EDWIN HAWLEY HEWITT .		1	7				Un	ivers	ity of	Minnesota.
GERALD MARTIN RICHMOND										Amherst.
EDWIN CHAPLIN WITHERBY										Amherst.

## ALPHA TAU OMEGA.

FRANK RAYMOND MINNIG .			1			. University of Pennsylvania.
------------------------	--	--	---	--	--	-------------------------------

## BETA THETA PI.

FREDERICK DELANO BUFFUM							Amherst.
WENDELL WYSE CHASE .	×				Mai	ne St	ate College.
Morris Kinnard Trumbull						Bel	oit College.

## KAPPA ALPHA.

GEORGE OWENS HASKELL			University of South Carolina.

## PHI GAMMA DELTA.

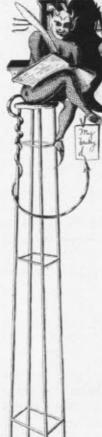
WILLIAM SUMNER BARTON	DANA	-	14		Worcester Polytechnical Institute.
-----------------------	------	---	----	--	------------------------------------

#### ZETA PSI.

HARRY HOW	ARD HAMLIN .		- 3							Bowdoin College.
-----------	--------------	--	-----	--	--	--	--	--	--	------------------

## PSI UPSILON.

THOMAS HALLY BISSELL				L	ehigh	University.
Asa Waters Grosvenor .						Amherst.
George Danforth Huntington			Ur	iver	sity o	f Rochester.



# TERNITY SYMMARY

								Me	mbers.
Sigma Chi				2			1.		22.
Theta Xi									14
Delta Psi									18
Chi Phi									18
Delta Kapp	аЕр	silon							23
Phi Beta E	psilo	n							26
Delta Upsil	on							*	17
Sigma Alpl	ha E	psilor	1		*				21
Delta Tau	Delta	ı	¥			100			14
Other Frate	ernit	ies re	prese	nted					16
								- 5	0
									189

Percentage of Fraternity men at Technology, 15.8.



"So many men, so many minds,"
These clubmen are of diverse kinds;
Sea dogs who baunt where waters (?) roll,
Frenchmen and Dutch who give the "spiels,"
Cyclists who boast of baving "wheels,"
And outlaws had, who drain the bowl.

So many clubs, both great and small, Can furnish offices to all Who love to be high cock-alorum; But one hard problem comes to each, One maxim every club can teach,—

It's beastly hard to get a quorum.

# HAMMER AND TONGS.

#### OFFICERS.

President.

JOHN PARKER ILSLEY, JR.

Vice President.

Secretary.

EDWARD STURTEVANT.

SAMUEL FOSDICK JONES.

Treasurer.

LEWIS ANDREWS HAYDEN.

#### MEMBERS.

ROBERT ANDERSON.

WILFRED BANCROFT.

JOSEPH BANCROFT.

THOMAS HALLY BISSELL.

CHARLES WALTER BRADLEE.

FRANKLIN WHITNEY DOLIBER.

CHARLES EWING.

WILLIAM HENRY FOX.

BROOKS FROTHINGHAM.

ASA WATERS GROSVENOR.

LEWIS ANDREWS HAYDEN.

RICHARD STANLEY HOWLAND.

BENJAMIN HURD.

JOHN PARKER ILSLEY, JR.

EDWARD JOHNSON, JR.

SAMUEL FOSDICK JONES.

GEORGE HERBERT McCARTHY.

JOHN SHELLEY PECHIN.

WILLIAM EDWARD PUTNAM.

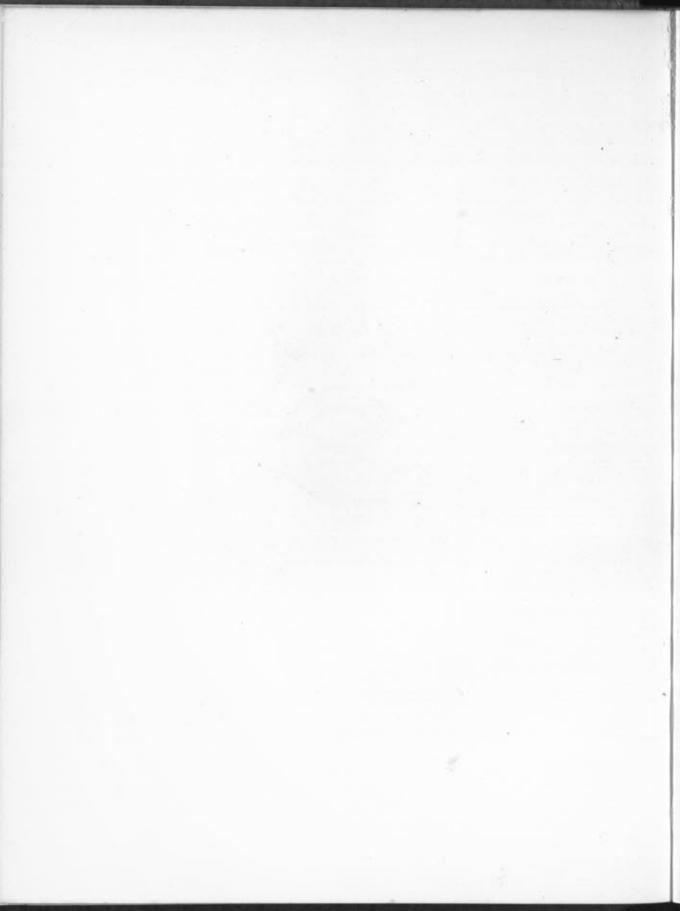
EDWARD BRIDGE RICHARDSON.

CARL SCHUTTLER.

EDWARD STURTEVANT.

GEORGE FREDERICK ULMER.





# DELTA SIGMA.



#### MEMBERS.

SAMUEL S. SADTLER.

CONRAD HENRY YOUNG.

NORMAN PAUL ROOD.

ROBERT JOHNSON.

FRANK E. GUPTIL. CARL LEON MORGAN.

Λίλιαν ὑρὶγτ καὶ κάδεριν Συώ ἀἱ κίπριδγες, τρεῖς γίγνωσκώ μᾶβελ φλόρενσε καὶ χουῖσε καὶ γεσργια ὑρὶγτ, ἔρ "ἀχατές."—Sphynxonius.

# Ka S.

#### Founded in 1885.

#### OFFICERS.

President.

ROBERT GEORGE HALL.

Vice President.

ARTHUR IRA FRANKLIN.

EORGE HALL.

Secretary.
RALPH ALBERT BOWEN.

Treasurer.

WILLIAM ALECK FAXON.

Librarian.

JOHN NEWTON GODDARD.

#### MEMBERS.

#### Class of '97.

RALPH ALBERT BOWEN.
JOHN BOYD.
CARROLL ADAMS CAPEN.
WILLIAM ALECK FAXON.

ARTHUR IRA FRANKLIN. ROBERT GEORGE HALL. WILLIAM GILBERT HILL, JR. ALBERT PERLEY NORRIS.

EDWARD HAROLD WOODWORTH.

#### Class of '98.

ARTHUR ALPHONZO BLANCHARD. HOWARD BROWNING COLLINS. DANIEL WILBERT EDGERLY. JOHN NEWTON GODDARD. Areli Hull Jacoby. Carleton Spayth Koch. Herbert Ivory Lord. Lewis Jerome Seidensticker.

WILLIAM WHITE.

#### Class of '99.

DWIGHT FARNUM.

CLIFFORD MELVILLE SWAN.

FRANK ROBINSON SWIFT.

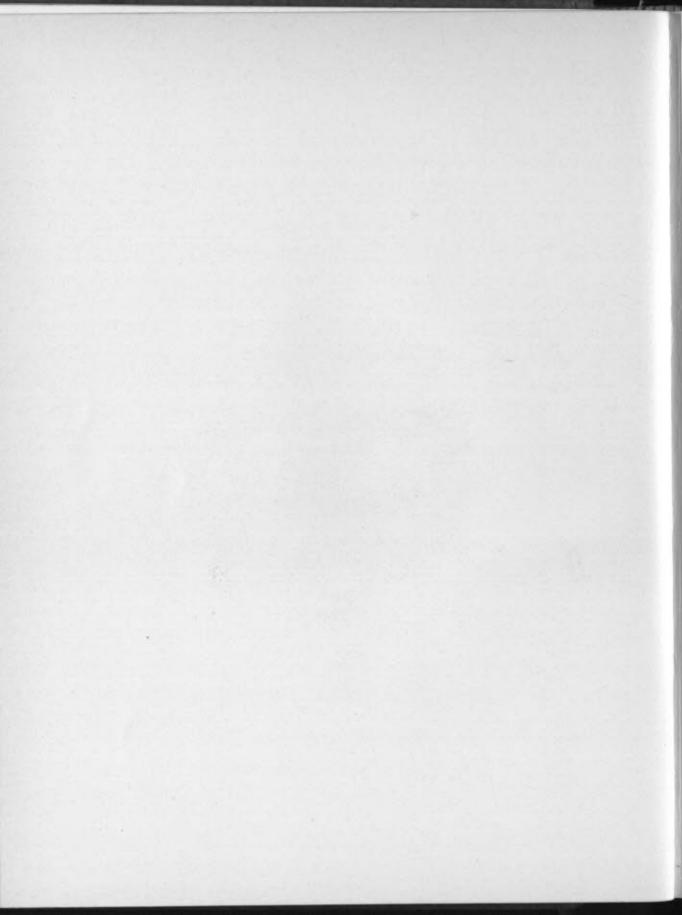
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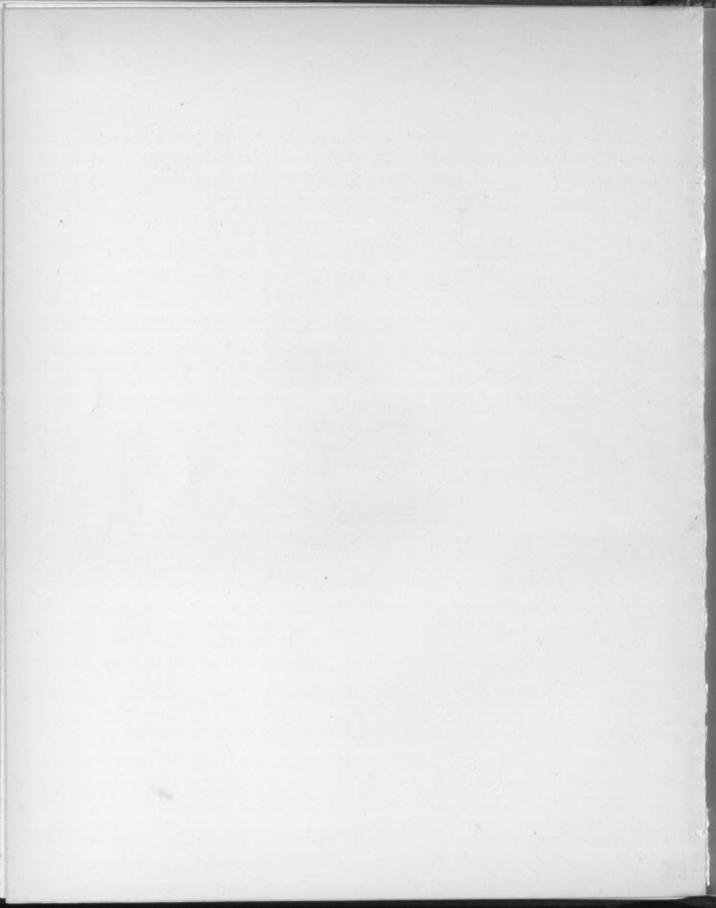
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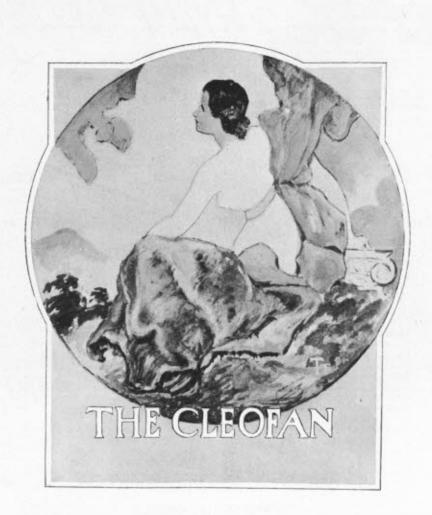
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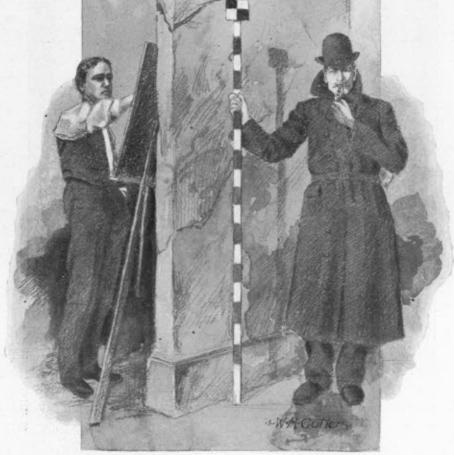
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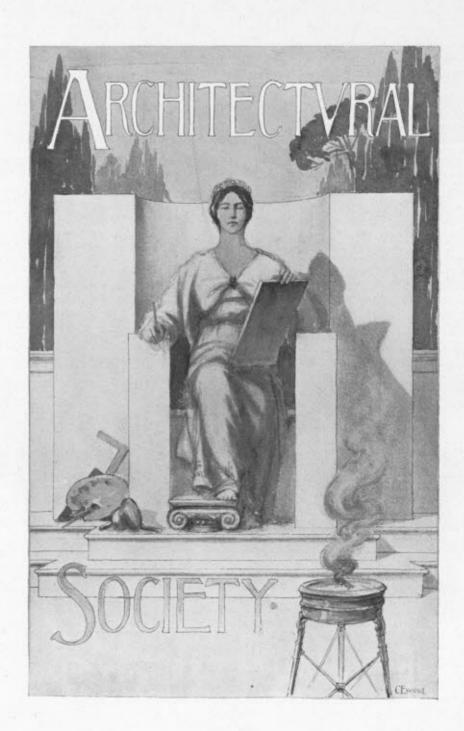
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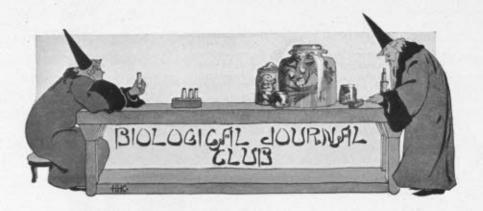
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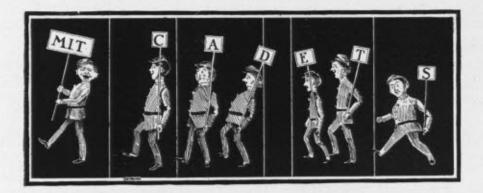
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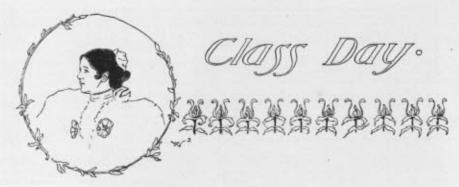




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FRANK EDWARD GUPTILL.
MARSHALL ORA LEIGHTON.
CHARLES E. LOCKE.
JOHN HENRY MANAHAN.

Third Marshal.

Butler Ames.

IRVING SEWARD MERRELL.
DANIEL ARTEMAS RICHARDSON.
FREDERICK WILLIAM SMYSER.
ALBERT WILLIAM THOMPSON.
JOHN TILLEY, JR.
CHARLES ELIPHALET TROUT.

#### June 8, 1896, Huntington Hall.

#### PROGRAMME.

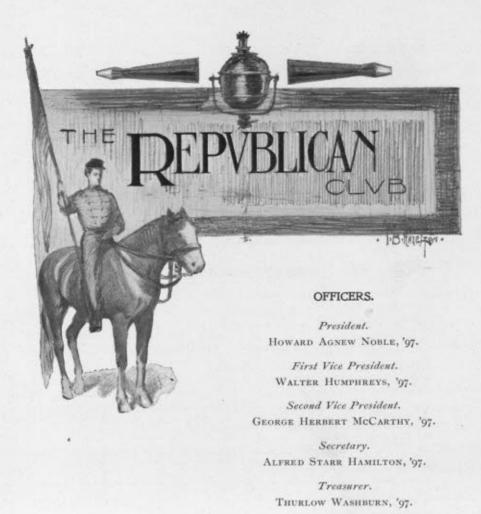
Overtur	e				***		18.		ORCHESTRA.
Address	by								. CHARLES GILMAN HYDE.
Music									0
History	,								Alphonsus Ligouri Drum.
Music									ORCHESTRA.
Statistic									
Music									ORCHESTRA.
Prophec	v								. Conrad Henry Young.
Music			5	-		27		12	ORCHESTRA.
Poem									EDWARD STACEY MANSFIELD.
Music									ORCHESTRA.
Oration		10							
Music									Orchestra.



# Graduation & 3 9 90 90 Exercises of ye class of 96

#### Huntington Hall, June 9, 1896.

Address PRESIDENT FRANCIS A. WALKER.
Reading of Abstracts of Theses.
A Practical Investigation of Bleaching Cotton Cloth, by the Mather Kier Daniel Moore Bates, Jr.
The Use of Small Models for the Determination of Stability
Osmotic Pressure Measurements and the Validity of Avogadro's Law as Applied to Solutions
Geological History of Lake Cochituate . Miss Elizabeth Florette Fisher.
A Plan for Sewerage and Sewage Disposal in the Town of Needham
Methods of Encouraging Immigration to the United States Joseph Hyde Knight.
A Study of a Spitzkasten
A Comparative Study of the Efficiency of the Pressed Yeasts Sold in Boston
Academic Hall and Gymnasium for Radcliffe College
An Investigation of Certain Properties of Wooden Rimmed Fly Wheels  Albert William Thompson and Conrad Henry Young.
An Investigation of the Acetylene Prepared from Copper Acetylide
A Design for a Jackknife Drawbridge for a Double-track Railroad
An Investigation of Certain Alternating Current Phenomena



#### Executive Committee.

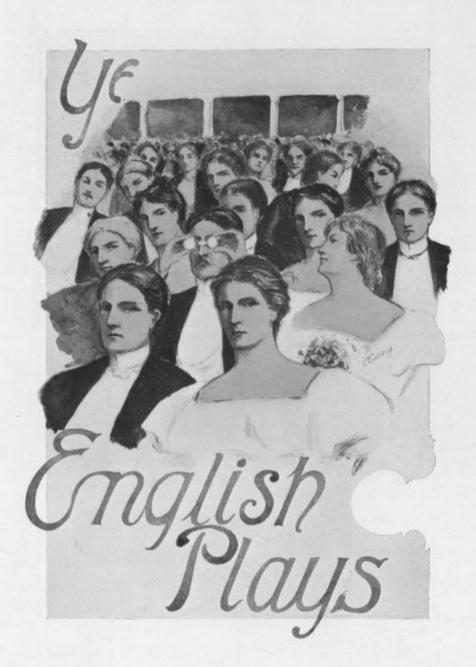
CHARLES WALTER BRADLEE, '97.

HERBERT IVORY LORD, '98.

EDWARD HOSMER HAMMOND, '99.

CHARLES BURTON COTTING, '00.





# WALKER GLUB PLAYS.

#### "MR. JONES, INSTRUCTOR."

A COMEDY IN ONE ACT, BY H. D. HUNT, '97.

#### The Cast of Characters.

Tom Jackson (Mr. Jones, Instructor), A Stude	nta	t M. I	. T., MR. FRANK E. GUPTILL, '96.
Jack Spofford, Tom's chum	2	4	Mr. Lester D. Gardner, '98.
Miss Mary Spofford, Jack's sister			Mr. Godfrey L. Smith, '98.
Miss Eudora Weeks, A student of Geology			Mr. Oswald C. Hering, '97.
Mr. Robert Spofford	-		Mr. Edwin C. Cramer, '96.
Mr. Alonzo Brown, Instructor at M. I. T.			MR. EVERETT M. CURTIS, '98.
Miss Alice Langham, Miss Spotford's friend		1	Mr. Joseph Cushing, '96.
Mr. Henderson Jackson, Tom's father .			Mr. Wm. K. Fairbanks, '97.
James			Mr. George H. Wright, '98.

Scene: Library at Mr. Spofford's house.

#### THE X-RAY MACHINE.

A COMEDY IN ONE ACT.

#### The Cast of Characters.

Prof. C. Eddy Current, A man with an idea .		Mr. Everett M. Curtis, '98.
Mr. D. Andy Oldboy, Elderly but fascinating .		MR. FRANK E. GUPTILL, '96.
Mr. Peter Whitehead, A little deaf		Mr. Oswald C. Hering, '97.
Miss Roxanna Wheeler, The new old woman .	4	Mr. Lester D. Gardner, '98.
Miss Dorothy Wheeler		Mr. Durand Mayer, '98.
Miss Mary Ann O'Shady, A fine figure of a girl		Mr. Augustus C. Lamb, '07.

Scene: The office of Prof. C. Eddy Current.

#### MANAGERS.

MR. HARRY D. HUNT, '97, Manager in Chief.

MR. CHARLES W. BRADLEE, '97, Business Manager.

MR. GEORGE H. McCarthy, '97, Financial Manager.

MR. Henry K. Sears, '96, Stage Manager.



TROISIEME REPRESENTATION PHEATRALE. SOCIETE FRANCAISE L'AVENIR.

Presenté le Samedi, 19 Decembre, 1896.



#### LES AMOURS D'UN TECHNOLOGIEN.

COMÉDIE EN UNE ACTE PAR M. G. L. SMITH.

#### Personnages.

M. Delaroux .		-								M. C. T. LEEDS.
Mme. Delaroux, sa	femm	ie		1	4.1		4	0.	M. F	. W. Southworth.
Elise, leur fille .						2				M. O. G. LUYTIES.
Fred Larkin, leur n	eveu								M. 1	F. H. McCrudden.
A. Percy Cholmond	leley,	LL.I	D., .	A.S.S.						M. C. E. LORD.
										M. G. E. Lynch.
Mlle. Mary Ann O'										M. G. L. SMITH.
Terence Mulvaney,	coche	er			45					M. E. S. CHAPIN.

#### VAUDEVILLE.

Weary Willie and D	Den	ny				Mm. Davison et Rogers.	
Danse Espagnole			4				. M. G. E. Lynch.
Character Sketch				167	¥.		. Mm. Mason et Smith.
Monologue de Coqu	elin						. M. CE. A. Winslow.

#### Direction de la Representation.

M. C. H. L. N. BERNARD.

M. H. I. LORD.	M.	E.	P.	Mason.
M. J. A. Collins.	M.	G.	T.	COTTLE.
M. W. O. Sawtelle.	M.	H.	C.	Morris.





#### Toastmaster.

#### CLIFFORD MILTON LEONARD.

The Cane R	tush		2		¥			43	14		STANLEY GAY HYDE FITCH.
The Compe	Competitive Drill								*		FREDERIC ELMER FOYE.
Glittering C	Sene	rali	ty			174			٠	÷	MILTON WESTON HALL.
Co-Eds.						,	*	*	*		GEORGE OTTO SCHNELLER.
The Class .											PHILIP BENSON COOPER.

Young's Hotel, March 27, 1897.



#### Toastmaster.

#### ARTHUR LITTLE HAMILTON.

Address							. Edward Hosmer Hammond.
Our Late Preside	ent			1	10	40	Clarence Renshaw.
Music .		18			ĸ		BENJAMIN PRESCOTT HAZELTINE LAWRENCE ADDICKS HARRY KEITH WHITE.
Athletics			0				HARRY LEONARD MORSE.
TECHNIQUE		(4)	7.	100	1	¥2	. ROLAND WILLIAMS STEBBINS.
Music .							'99 Quartette.
That Painful Ne	cessity			13		4.0	. GERALD MARTIN RICHMOND.
Retrospect			88	0.53	63	*	WILLIAM MALCOLM CORSE.
"The Tech"							Edwin Ruthven Sheak.
							OSCAR GEORGE VOGT.
Faint Heart	kg 40			٠,	61	33	NORMAN PAUL ROOD.
The Institute					•	80	. Alexander Rieman Holliday.
Music .			25			20	Harry George Johnson.
Our Freshman		¥	9				. Louis William Shumaker.

Hotel Brunswick, March 12, 1897.



# Toastmaster. HERBERT IVORY LORD.

Class of '9	8	14	6	200		32		1		GEORGE REED WADSWORTH.
The Facul	lty		34							. LESTER DURAND GARDNER.
" The Tec	h " V	Vom	an						2	LEON ALLAND.
GEO	ORGE	Ru		FORI	AN	THON	Y.		WI	'98 QUARTETTE. INTHROP RUFUS DODGE. HERTON HOWE TUCKER.
Money										. EDWARD SAMUEL CHAPIN.
Vacation										Edward Johnson, Jr.
The West										. THOMAS EDDY TALLMADGE.
										Banjos and Guitar.
			NOT							SERT SEELEY DE GOLYER.
						NK	BRID	GHAM	PER	RY.
										ERNEST FRANK RUSS.
										. Asa Waters Grosvenor.
Stories			•							EVERETT NICHOLS CURTIS. JOHN STEARNS BLEECKER.
Duet G		GE F			oswo					. Mandolin and Guitar. ses Ezra Hazeltine.
Athletics										HAROLD WELLINGTON JONES.
Spirits										ROBERT ALLYN.
The South										Maurice de Kay Thompson, Jr.
Music										'98 QUARTETTE.
Labor Un								100.00		
New Engl	and						82			. CARLETON SPAYTH KOCH.
Personalit	ies		10						20	Albert Rix Shedd.
Poem		10	927		¥1	12			4	. George Henry Wright.
Duet	12			23						. Mandolin and Guitar.
TECHNIQU	E		3.7							LES-EDWARD AMORY WINSLOW.
Technolog										Howell Fisher.
	74					1.7			7.1	

Exchange Club, March 6, 1897.



#### Toastmaster.

#### HENRY WALTER ALLEN.

The Class of '97 .							WILFRED BANCROFT.
A Few of My Particular I	rie	nds				. Joi	IN ARTHUR COLLINS, JR.
Music, '97 Quartette .			Messi	rs. L	AMB,	BARKE	R, ROBINSON, HOWLAND.
Athletics							THURLOW WASHBURN.
Fifty Years Ago .	•		-				. Joseph Bancroft.
Philistinism and Science		10			¥		HARRY DRAPER HUNT.
Music			ű.		Ŷ		. '97 QUARTETTE.
Snide Talks with Men		0	0		2	Oswai	LD CONSTANTIN HERING.

Young's Hotel, March 6, 1897.



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Secretary. HERBERT IVORY LORD.

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HOWELL FISHER.

Mabel Flora Forrest.

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George Anthony Hutchinson.

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ERNEST FRANK RUSS.

WILLIAM RANDOLPH STRICKLAND.

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FRED HENRY TWOMBLY.

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GEORGE REED WADSWORTH.

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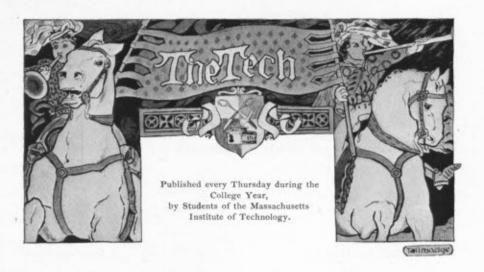






Word Gardner Sheak • Ma Gee • Jones • Wadsworth West-Trumbull-Tallmadge-Renshaw • Winslow Strickland Hunt





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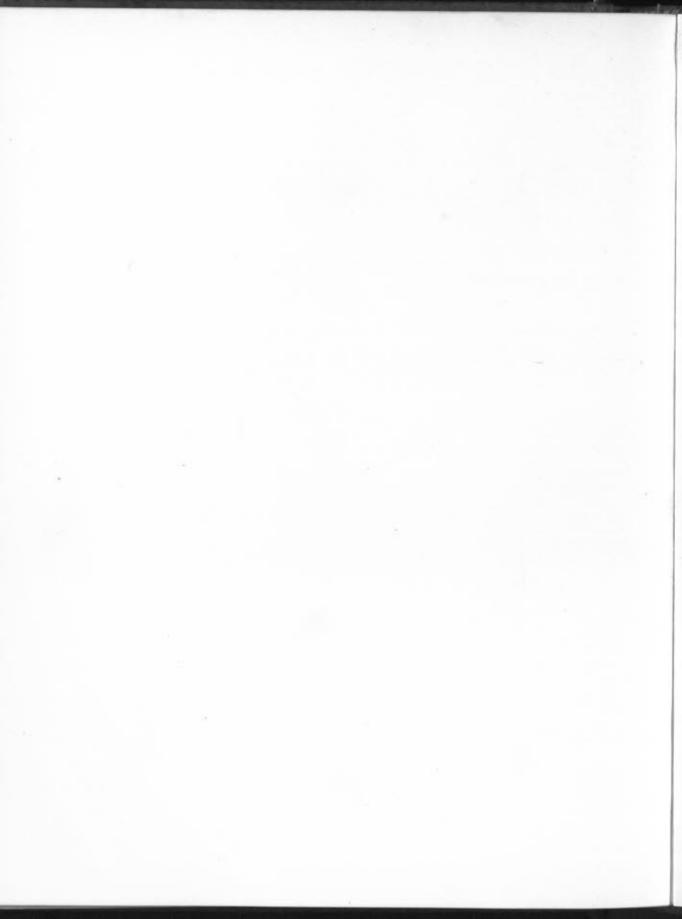
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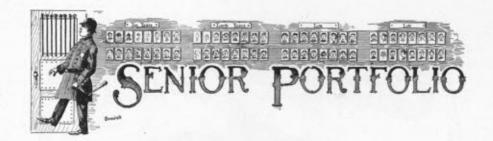
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# Editorial on General Athletics.

TECHNOLOGY'S athletic history is brief, but by no means one to be ashamed of. During the past fifteen years our athletes have striven to bring glory to their college in various lines and with varying success. It might be expected that at an institution like our own, where so much time has to be given to class work, very little could be accomplished in the way of athletics; but such has not been the case, and we look back with no little pride upon our records. Though we cannot always develop a winning team, yet we can always aim for the high standard which has been maintained in years past.

Track athletics is, perhaps, the branch in which we have won the most honors in recent years; and while our record of last spring is not one in which we take pride, yet our prospects for the present year are bright. Last year our Relay Team was very successful, defeating three colleges of a high athletic standard, at Philadelphia.

In baseball we have no 'Varsity nine, but a great deal of interest is taken in the development of teams from the two lower classes. These class baseball teams compare very favorably with strong nines from many good preparatory schools in the vicinity of Boston.

The Tennis Association, formed in 1895, is in a flourishing condition, two tournaments having been held since then.

In the following pages devoted to athletics, the object has been to place, in as compact a form as possible, the athletic events which have taken place at Technology during the past year, as well as many items of general interest. In preceding Techniques it has often been the custom to include much which has to do with athletics entirely outside of Technology. While comparisons may in some cases be interesting, yet such a mass of statistics is often the reverse, and it has been thought best, therefore, to omit them, especially as the difficulty of obtaining accuracy is very great.



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VAN RENSSELAER LANSINGH, '98.

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Asa Waters Grosvenor, Captain of Technology Track Team.

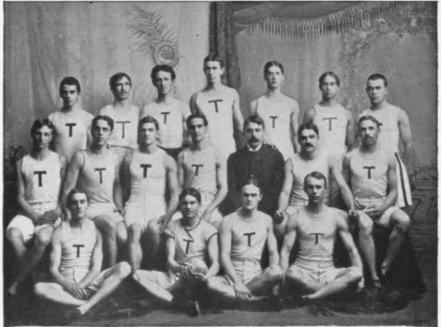
CHARLES BOWLES STEBBINS, Captain of '97 Track Team.

HAROLD WELLINGTON JONES, Captain of '98 Track Team.

WILLIAM EATON WEST, Captain of '99 Track Team.

Russell Parker Priest, Captain of 1900 Track Team.







Butcher Osgoodferguson-Jones-Rummery-Mayer-Pugh:

Nolle Hurd Grosvenor-Cummings Kashburn Hooker Stebbins

hest: Farnham - Gray - Bakenbus -





Captain.
HENRY CUMMINGS, Jr., '96.

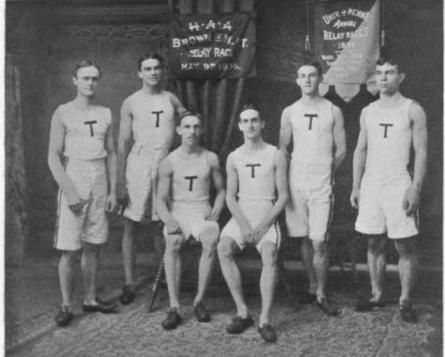
Manager.
Thurlow Washburn, '97.

# TRACK TEAM.

ASA WATERS GROSVENOR, '98. REUBEN EDWARD BAKENHUS, '96. HAROLD WELLINGTON JONES, '98. BENJAMIN HURD, '96. OWEN HERRICK GRAY, '97. DURAND MAYER, '98. STANLEY AGAR HOOKER, '97. JULIUS NOLTE, '98. RALPH ROLLINS RUMERY, '98. EDWIN PUTNAM OSGOOD, '97. ROBERT ARTHUR FERGUSON, '99. ACHILLES HENRY PUGH, '97. CHARLES BOWLES STEBBINS, '97. HORACE PORTER FARNHAM, '99. WILLIAM LARAMY BUTCHER, '98. FRED LEWIS HOLT KIMBALL, '99.

WILLIAM EATON WEST, '99.







Gray Mooker West Pugh.
Stebbins · Cummings ·





# M. I. T. vs. Amherst, Worcester Polytechnic Institute, and Union, Franklin Field, Philadelphia, April 25, 1896.

Won by M. I. T. Time, 3 min. 371 sec.

The men ran in the following order: GRAY, PUGH, CUMMINGS, STEBBINS.

By winning this race, M. I. T. was eligible to compete with five other winning teams for the championship of the United States. The time of 3 minutes  $37\frac{1}{5}$  seconds was bettered by only two teams, Harvard and Lafayette. The team enjoyed the hospitality of the Mask and Wig Society during its stay in Philadelphia.

# M. I. T. vs. Brown, Holmes Field, Cambridge, May 9, 1896.

Won by M. I. T.\* Time, 3 min. 294 sec.

The men ran in the following order: GRAY, PUGH, CUMMINGS, STEBBINS.

# M. I. T. vs. Brown, Mechanics Hall, Boston, February 6, 1897.

Won by Brown. Time, 3 min. 191 sec.

The men ran in the following order: GROSVENOR, LATHROP, GRAY, STEBBINS.

## M. I. T. vs. Boston College, Mechanics Hall, Boston, March 12, 1897.

Won by M. I. T. Time, 3 min. 195 sec.

The men ran in the following order: GROSVENOR, PRIEST, LATHROP, STEBBINS.

<sup>\*</sup>Yale ran, also, and finished first, but the race was a match race between M. I. T. and Brown.

# NEW ENGLAND

# INTERCOLLEGIATE ATHLETIC ASSOCIATION.

#### MEMBERS.

Amherst College.
Bowdoin College.
Brown University.
Dartmouth College.
Institute of Technology.

Trinity College.
Tufts College.
Wesleyan University.
Williams College.
Worcester Polytechnic Institute.

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Vice President, I. G. HICKS, Brown.

Secretary, I. R. KENT, Tufts.

Treasurer, H. W. Jones, M. I. T.

## Executive Committee.

С. А. Воотн, W. P. I.

T. L. PIERCE, Bowdoin.

J. H. LECOUR, Trinity.

# TENTH ANNUAL MEETING OF THE NEW ENGLAND INTERCOLLEGIATE ATHLETIC ASSOCIATION.

# Worcester, May 23, 1896.

EVENT.					WINNERS. TIME, HEIGHT, OR DISTANCE.
100-Yard Dash		٠			D. F. O'BRIEN, Brown 10 2-5 sec. H. H. SEARS, Dartmouth. H. H. Christopher, Dartmouth.
220-Yard Dash	*	*			D. F. O'BRIEN, Brown 23 1-5 sec. R. T. ELLIOTT, Amherst. C. F. KENDALL, Bowdoin.
440-Yard Dash				.1	C. B. STEBBINS, M. I. T 52 3-5 sec. R. T. ELLIOTT, Amherst. W. H. HALL, Dartmouth.
880-Yard Run .					C. E. Bolser, Dartmouth 2 min. 3 sec. H. P. Kendall, Amherst. A. W. Boston, Dartmouth.
One-Mile Run .				1	J. N. PRINGLE, Dartmouth 4 min. 42 4-5 sec. F. A. Tower, Wesleyan. S. B. Furbush, Amherst.
Two-Mile Run .					F. A. Tower, Wesleyan 10 min. 27 4-5 sec. O. N. Bean, Brown. J. D. Sinkinson, Bowdoin.
One-Mile Walk	٠	¥	٠	٠	H. F. HOUGHTON, Amherst 7 min. 16 4-5 sec. E. E. Tyzzer, Brown. W. J. Bartlett, Brown.
Two-Mile Bicycle		٠	*		G. L. Gary, Dartmouth 6 min. 28 1-5 sec. C. W. Donahue, Tufts. H. P. Farnham, M. I. T.

120-Yard Hurdle	S. Chase, Dartmouth J. H. Horne, Bowdoin. A. Mossman, Amherst.	1		5	7	16 1-5 sec.
220 Yard Hurdle	S. Chase, Dartmouth J. H. Horne, Bowdoin. A. Mossman, Amherst.	*				26 1-5 sec.
Running Broad Jump	S. Chase, Dartmouth . J. H. Horne, Bowdoin . T. W. Chase, Dartmouth					20 ft. 5 1-2 in. . 20 ft. 1-2 in. 19 ft. 5 1-2 in.
Running High Jump	E. G. LITTELL, Trinity .					*5 ft. 9 3-4 in. 5 ft. 8 in. 5 ft. 6 in.
Pole Vault	W. A. WYATT, Wesleyan R. P. WILDER, Dartmouth E. L. MORGAN, Amherst H. E Scott, W. P. I.					10 ft. 8 3-4 in. 10 ft. 6 in. 
Putting Shot (16 lbs.)	E. R. Godfrey, Bowdoin F. E. Smith, Brown M. H. Tyler, Amherst .					38 ft. 1 1-2 in.
Throwing Hammer (16 lbs.)	F. E. SMITH, Brown J. P. COOMBS, Brown R. E. HEALEY, Tufts					. 133 ft. 8 in 108 ft. 2 in 103 ft.

\* New Record.

# SUMMARY OF POINTS.

	Dart,	Brown.	Am.	Bow.	Wes.	Trin.	M. I. T.	Tufts.	W.P.I.
100-Yard Dash,	4	5	0	0	0	0	0	0	0
220-Yard Dash,	0	5	3	1	0	0	0	0	0
440-Yard Dash,	1	0	3	0	0	0	5	0	0
880-Yard Run,	6	0	3	0	0	0	0	0	0
One-Mile Run,	5	0	1	0	3	0	0	0	0
Two-Mile Run,	0	3	0	1	5	0	0	0	0
One-Mile Walk,	0	4	5	0	o	0	0	0	0
Two-Mile Bicycle,	5	0	0	0	0	0	1	3	0
120-Yard Hurdle,	5	0	I	3	0	0	0	0	0
220-Yard Hurdle,	5	0	I	3	0	0	0	0	0
Broad Jump,	6	0	0	3	0	0	0	0	0
High Jump,	0	0	1	0	0	8	0	0	0
Pole Vault,	3	0	ł.	0	5	0	0	0	ł.
16-lb. Shot,	o	3	1	5	0	0	0	0	. 0
16-lb. Hammer,	0	8	O	o	O	0	0	I	0
m , ,	-	-0		_	-				-
Totals,	40	28	194	16	13	8	6	4	2

# WINNERS OF THE CHAMPIONSHIP.

 1887.
 Dartmouth.
 1892.
 Amherst.

 1888.
 Amherst.
 1893.
 Dartmouth.

 1889.
 Dartmouth.
 1894.
 M. I. T.

 1890.
 Amherst.
 1895.
 Dartmouth.

 1891.
 Amherst.
 1896.
 Dartmouth.

<sup>†</sup> Morgan and Scott tied. The point is divided.







Rubiery Butcher Allyz Bodwell Chapitz Groguenor
Mayer Molle Jones Harris House





Captain.

JULIUS NOLTE.

Manager.

FRED HENRY TWOMBLY.

#### TEAM.

ROBERT ALLYN.
HOWARD LAWRENCE BODWELL.
WILLIAM LARAMY BUTCHER.
EDWARD SAMUEL CHAPIN.
ASA WATERS GROSVENOR.
RALPH HARRIS.

WINFRED DEAN HUBBARD.
JOHN HENRY HOUSE.
HAROLD WELLINGTON JONES.
DURAND MAYER.
RALPH ROLLINS RUMERY.
ERNEST FRANK RUSS.

# ANNUAL SPRING MEETING.

Irvington Oval, May 27, 1896.

EVENT.	WINNERS.		TIME, HEIGHT, OR DISTANCE
100-Yard Dash	A. W. Grosvenor, '98 . O. H. Gray, '97. A. H. Pugh, '97.	* 9*	10 2-5 sec
220-Yard Dash	A. W. Grosvenor, '98 . A. H. Pugh, '97. O. H. Gray, '97.		24 2-5 sec
440-Yard Dash	C. B. Stebbins, '97 A. H. Pugh, '97. W. E. West, '99.	• •	56 sec
880-Yard Run	C. B. Stebbins, '97 F. H. Lathrop, '99. H. P. Farnham, '99.		2 min. 9 2-5 sec
One-Mile Run	S. A. HOOKER, '97 H. A. B. CAMPBELL, '99. R. R. RUMERY, '98.		5 min. 2 sec
Two-Mile Run	E. P. OSGOOD, '97 R. R. RUMERY, '98. W. E. REED, '97.		11 min. 56 1-5 sec
One-Mile Walk	Durand Mayer, '98 Robert Allyn, '98. J. H. House, '98.		*8 min. 2 sec
120-Yard Hurdle	R. A. Ferguson, '99 R. R. Rumery, '98. T. Washburn, '97.		17 3-5 sec
Running Broad Jump	W. L. BUTCHER, '98 R. HARRIS, '98. J. NOLTE, '98.	• •	19 ft. 4 in
Running High Jump	W. L. Butcher, '98 R. A. Ferguson, '99. R. Harris, '98.		5 ft. 4 in
Pole Vault	W. L. BUTCHER, '98 F. L. H. KIMBALL, '99. E. S. CHAPIN, '98.		9 ft. 4 1-2 in
Putting Shot (16-lbs.)	H. W. Jones, '98 F. L. H. Kimball, '99. A. C. Lootz, '96.		35 ft. 1 in
Throwing Hammer (16 lbs.,	H. W. Jones, '98		82 ft. It in

<sup>\*</sup> New Record.

# Handicap Games.

Irvington Oval, October 24, 1896.

EVENT.	WINNERS. HANDICAP. TIME, HEIGHT, OR DISTANCE.
100-Yard Dash	O. H. Gray, '97, 4½ yards 10 2-5 sec. G. P. Burch, '99, 4½ yards. A. H. Pugh, '97, 4 yards.
220-Yard Dash	M. W. Hall, '00, 15 yards 24 sec. O. H. Gray, '97, 10 yards. A. H. Pugh, '97, 8 yards.
440-Yard Dash	W. D. Hubbard, '98, 12 yards 55 3-5 sec. A. W. Grosvenor, '98, scratch. H. L. Morse, '99, 12 yards.
880-Yard Run	H. L. Morse, '99, 25 yards 2 min. 6 4-5 sec. C. B. Stebbins, '97, scratch. C. S. High, '98, 35 yards.
One-Mile Run	H. L. Bodwell, '98, 35 yards 5 min. 6 3-5 sec. H. A. B. Campbell, '99, 40 yards. S. A. Hooker, '97, scratch.
Two-Mile Run	R. Suter, '00, 200 yards
Mile Walk	D. MAYER, '98, scratch 8 min. 25 2-5 sec. R. ALLYN, '98, 20 seconds. J. H. House, '98, 40 seconds.
120-Yard Hurdle Race	R. R. Rumery, '98, scratch 18 4-5 sec. J. F. Wentworth, '00, scratch.
Running Broad Jump	A. W. Grosvenor, '98, scratch *22 ft. 1 1-2 in. J. H. House, '98, 2 feet 21 ft. 3 1-2 in. W. L. Butcher, '98, 8 inches 20 ft. 8 in.
Running High Jump	W. L. Butcher, '98, 2 inches 5 ft. 6 in. R. A. Ferguson, '99, scratch 5 ft. 4 in. A. W. Grosvenor, '98, 2 inches 5 ft. 1 3-4 in.
Putting Shot (16 lbs.)	H. W. Jones, '98, scratch
Throwing Discus	H. W. Jones, '98, scratch *93 ft. 8 in. F. C. Field, '97
Class Team Race	'99, Dryer, Sawyer, Burch, West. '97, Field, Gray, Pugh, Stebbins. '98, Mayer, Nolte, House, Grosvenor. '00, Hall, Emery, Wentworth, Priest.

<sup>\*</sup> Technology Record.

# FIFTH ANNUAL GROSS-GOUNTRY RUN.

November 9, 1896.

FIRST.

E. P. Osgood, '97.

Time, \*28 minutes, 563 seconds.

SECOND.

H. B. MAYHEW, '00.

# ANNUAL INDOOR WINTER MEETING.

Technology Gymnasium, December 12, 1896.

EVENT.	WINNERS. TIME, HEIGHT, OR DISTANCE.
35-Yard Dash	 A. W. GROSVENOR, '98 4 1-5 sec.
	O. H. Gray, '97.
	G. P. Burch, '99.
35-Yard Hurdle	 A. W. Grosvenor, '98 5 sec.
	G. P. Burch, '99.
	G. I. Copp, '99.
Potato Race	 W. E. Putnam, '98
	А. Н. Ридн, '97.
	D. Mayer, '98.
Broad Jump	 E. F. Russ, '98 9 ft. 8 3-4 in.
	A. W. Grosvenor, '98 9 ft. 8 1-2 in.
	С. S. Нібн, '98 9 ft. 5 in.
High Jump	 W. E. Putnam, '98 5 ft. 7 1-4 in.
	W. L. Butcher, '98 5 ft. 4 1-4 in.
	G. P. Burch, '99 5 ft. 3 1-4 in
Pole Vault	 W. E. Putnam, '98 9 ft. 3 1-2 in.
	W. L. BUTCHER, '98 $\Big\}$ tied for second $\ $ 9 ft. 1 1-2 in. J. Nolte, '98
Putting Shot (16 lbs.)	 H. W. Jones, '98 *36 ft. 9 in.
	С. S. Нібн, '98 32 ft. то in.
	H. L. Bodwell, '98 32 ft. 6 in.

<sup>\*</sup> New Record.

# SUMMARY OF POINTS FOR THE GLASS GHAMPIONSHIP FOR THE YEAR 1895-96.

Championship won by the Class of '98, with 85 points. First place counts 5, second 3, and third 1.

				Firsts.	Seconds.	Thirds.	Totals.
Class of '98				11	7	9	85 -
Class of '97				6	5	6	51
Class of '96	187			4	4	2	34
Class of '99		43	×	1	6	4	27

# Outdoor Events.

			'98	'97	'99	'96			'98	'97	'99	'96
100-Yard Dash	8		5	4	0	0	Broad Jump		9	0	0	0
220-Yard Dash	9		5	4	0	0	High Jump	12	6	0	3	0
440-Yard Dash			0	8	1	0	Pole Vault		6	0	3	0
880-Yard Dash			0	5	4	0	Putting Shot		5	0	3	1
One-Mile Run .							Throwing Hammer					
Two-Mile Run .			3	6	0	0	Cross-Country Run		0	4	0	5
One-Mile Walk									-	-	_	-
120-Yard Hurdle			3	1	5	0			57	37	22	10

# Indoor Events.

			'98	'96	'97	199				'98	'96	'97	'99
35-Yard Dash		10	6	0	3	0	Broad Jump			3	5	0	1
							High Jump .						
Potato Race	e.		4	0	5	0	Putting Shot	*		5	3	0	1
Rope Climb .			6	3	0	0				-0		-	-
Fence Vault			0	8	O	0				20	24	14	5

# SUMMARY OF POINTS FOR THE INDIVIDUAL EXCELLENCE GUP.

# Cup won by Asa Waters Grosvenor, with 23 points.

A. W. GROSVENOR, '98, 23.

C. B. STEBBINS, '97, 20.

W. L. BUTCHER, '98, 19.

A. H. GREEN, '96, 18.

H. W. JONES, '98, 15.

R. A. FERGUSON, '99, 12.

O. H. GRAY, '97, 7.

F. L. KIMBALL, '99, 7.

А. Н. Ридн, '97, 7.

R. R. RUMERY, '98, 7.

R. E. BAKENHUS, '96, 6.

E. P. OSGOOD, '97, 6.

H. L. BODWELL, '98, 5.

H. CUMMINGS, '96, 5.

S. A. HOOKER, '97, 5.

D. MAYER, '98, 5.

R. HARRIS, '98, 4.

A. C. LOOTZ, '96, 4.

R. ALLYN, '98, 3.

H. A. B. CAMPBELL, '99, 3.

F. H. LATHROP, '99, 3.

S. F. WISE, '97, 3.

E. S. CHAPIN, '98, 1.

H. P. FARNHAM, '99, 1.

F. C. FIELD, '96, 1.

J. H. House, '98, 1.

W. D. Hubbard, '98, 1.

J. NOLTE, '98, 1.

W. E. REED, '97, 1.

E. A. SUMNER, '97, 1.

T. WASHBURN, '97, I.

W. E. WEST, '99, 1.

# SEVENTEENTH ANNUAL SCRATCH GAMES OF THE

# М. І. Т. Атньетіс Сьив.

# M. I. T. Gymnasium, March 14, 1896.

EVENT.	WINNERS. TIME, HEIGHT, OR DISTANCE.
35-Yard Dash (novice)	O. H. GRAY, M. I. T 4 1-5 sec. W. E. West, M. I. T.
35-Yard Dash	A. W. Grosvenor, M. I. T
40-Yard High Hurdle	T. P. Curtis, B. A. A 5 4-5 sec. F. W. Lord, B. A. A.
Running High Jump	 W. E. PUTNAM, H. A. A. and N. A. A. 5 ft. 10 1-4 in. E. H. CLARK, H. A. A. and B. A. A.
Pole Vault	W. W. Hoyt, H. A. A. and B. A. A 10 ft. 4 1-2 in. E. Atherton, B. A. A.
Putting Shot (16 lbs.)	 A. LOVERING, H. A. A
Potato Race	С. В. Stebbins, M. I. T

<sup>\*</sup> World's Record made by Grosvenor.



# Technology Records.

# STANDARD EVENTS.

100-Yard Dash R. W. CARR, '95 10 2-5 A. W. GROSVENOR, '98.	sec.
220-Yard Dash R. W. CARR, '95	sec.
440-Yard Dash J. A. ROCKWELL, '96 51 1-	
880-Yard Run T. Spencer, '91 2 min. 6 2-	sec.
One-Mile Run G. CLAPP, '95 4 min. 37 4-	sec.
Two-Mile Run S. F. Wise, '97 11 min. 25 4-	
One-Mile Walk D. MAYER, '98 8 min.	sec.
120-Yard Hurdle B. HURD, '96	sec.
220-Yard Hurdle B. HURD, '96	sec.
Two-Mile Bicycle W. C. MARMON, '95 5 min. 26 4-	sec.
Running Broad Jump A. W. GROSVENOR, '98 22 ft. 1 I	-2 in.
Running High Jump C. D. HEYWOOD, '93 6 ft. 1	2 in.
Pole Vault J. CRANE, JR., '92 to ft.	7 in.
Putting Shot (16 lbs.) H. W. Jones, '98	9 in.
Throwing Hammer (16 lbs.) C. H. PARKER, '95	4 in.

# SPECIAL EVENTS.

EVENT.		HOLDER,					RECORD.
20-Yard Dash		F. W. LORD, '94					3 sec.
		A. W. GROSVENOR, '98					
		B. Hurd, Jr., '96					
		J. A. ROCKWELL, JR., '96					
Cross Country Run .		E. P. Osgood, '97					28 min. 56 3-5 sec.
Class Team Race	4	. Class of '94	+				. 3 min. 18 sec.
Standing Broad Jump	. 1	L. BURNETT, '96				×	. 10 ft. 1 1-2 in.
Three Standing Broad,	Tum	øs E. A. Boeseke, '95 .		0			. 32 ft. 8 1-8 in.
Standing High Jump		F. R. YOUNG, '86 , .					4 ft. 10 in.
Fence Vault		A. H. GREEN, '96			2		7 ft. 2 I-4 in.
Running High Kick .		C. D. HEYWOOD, '93 .					9 ft. 3 1-2 in.
Rope Climb		H. L. BODWELL, '98 .	1	1		3	5 2-5 sec.
		H. W. Jones, '98					

<sup>\*</sup> World's Record.

# RECORDS OF THE NEW ENGLAND INTERCOLLEGIATE ATHLETIC ASSOCIATION.

EVENT.	RECORD.	HOLDER,	COLLEGE AND DATE.
100-Yard Dash .	10 1-5 sec.	H. S. PATTERSON	Williams, 1895.
220-Yard Dash .	22 3-5 sec.	H. C. IDE	. Dartmouth, 1892.
440-Yard Dash .	50 I-5 sec.	G. B. Shattuck	Amherst, 1891.
880-Yard Run	2 min. 1 2-5 sec.	H. L. DADMUN .	Worcester, 1891.
One-Mile Run	4 min. 32 1-5 sec.	G. O. JARVIS	Wesleyan, 1893.
Two-Mile Run .	10 min. 8 2-5 sec.	G. O. JARVIS	Wesleyan, 1893.
One-Mile Walk .	7 min. 15 3-5 sec.	H. F. HOUGHTON	Amherst, 1894.
Two-Mile Bicycle	5 min. 27 4-5 sec.	W. C. MARMON .	M. I. T., 1894.
120-Yard Hurdle .	15 3-5 sec.	S. Chase	. Dartmouth, 1895.
220-Yard Hurdle .	26 sec.	H. C. IDE	. Dartmouth, 1892.
Running Broad Jum	p 22 ft. 3 in.	S. Chase	. Dartmouth, 1895.
Running High Jump	5 ft. 9 3-4 in.	I. K. BAXTER	Trinity, 1896.
Pole Vault	10 ft. 9 in.	H. L. TOWNE .	Williams, 1892.
Putting Shot (16 lbs.	) 38 ft. 6 1-2 in.	E. R. GODFREY .	Bowdoin, 1896.
Throwing Hammer (	(16 lbs.) 133 ft. 8 in.	F. E. SMITH	Brown, 1896.

# World's Amateur Records.

# STANDARD EVENTS.

EVENT. RECO	RD, HOLDER.	PLACE AND DATE.
100-Yard Dash 9 4-5	sec. { John Owen, Jr B. J. Wefers B	Washington, 1890. erkeley Oval, 1896.
220-Yard Dash 21 1-5	sec. B. J. Wefers . B	erkeley Oval, 1896.
440-Yard Dash (straight away) 47 3-4	sec. Wendel Baker .	Boston, 1886.
880-Yard Dash 1 min. 53 2-5	sec. C. H. KILPATRICK, No.	ew York City, 1895.
One-Mile Run 4 min. 15 3-5	sec. T. P. CONNEFF . Ne	w York City, 1895.
Two-Mile Run 9 min. 17 2-5	sec. W. G. GEORGE	. England, 1884.
One-Mile Walk 6 min. 29 3-5	sec. F. P. MURRAY . No	w York City, 1883.
120-Yard Hurdle 15 2-5	sec. S. Chase T	ravers Island, 1895.
220-Yard Hurdle 24 3-5	sec. J. L. Bremer . E	Serkeley Oval, 1894.
Running Broad Jump 23 ft. 6 1-	2 in. { C. S. REBER	. Detroit, 1891.
Running High Jump 6 ft. 5 5-	in. M. F. SWEENEY . Ne	w York City, 1895.
Pole Vault 11 ft. 5 3-	in. W. S. Rodenbaugh,	Philadelphia, 1892.
Putting Shot (16 lbs.)	7 ft. G. R. GRAY	. Chicago, 1893.
Throwing Hammer (16 lbs.) 145 ft. 3-	4 in. J. S. MITCHELL . T	ravers Island, 1892.

# М. І. Т. Роотваць Аѕѕосіятіом.

# OFFICERS.

President.

HOWARD AGNEW NOBLE, '97.

Vice President.

Secretary-Treasurer.

RALPH SPELMAN WHITING, '97.

ERNEST FRANK RUSS, '98.

Captain.

FRANK EDWARD UNDERWOOD, '97.

# Executive Committee.

HERBERT PAGE BEERS, '97.

GEORGE FREDERICK ULMER, '98.

GEORGE ROGERS HECKLE, '99.

Manager of Team.

Augustus Clark Lamb, '97.







Fairbanks Hopkins waither Wilder McCormack-Mansheld McConnell-Whier Lamb Underwood Reckle Le Baron: Note Emery Sanchez





# GAMES.

							0
							Score.
October 3.	Technology vs. Exeter, at Exeter .						 0-0
October 7.	Technology vs. Colby, at Boston .				*	×	0-4
October 10.	Technology vs. Campello, at Campello	)	35	100			. 0-0
October 17.	Technology vs. Trinity, at Hartford					1	6-16
October 21.	Technology vs. Tufts, at Medford .			4.7			0-0
	Games played		5				
	Games won	-	0				
	Games tied		3				
	Games lost		2				

# TEAM.

W. K. Fairbanks, '97.	F. E. Mansfield, '98.
F. N. LE BARON, '97.	W. G. McConnell, '98
E. B. McCormick, '97.	J. Nolte, '98.
F. E. Underwood, '97.	G. F. Ulmer, '98.
W. J. WALTHER, '97.	C. W. WILDER, '98.
E. C. EMERY, '98.	G. R. HECKLE, '99.
H. A. HOPKINS, '98.	P. B. Sanchez, '99.







Vike Copp Walton Fowle Ferguson MacBride Marrison Vogt Eaton Blake Tutts Samuels Slocumb Maxie Holliday Hinman





Captain. Kenneth M. Blake.

Manager.

George I. Copp.

# TEAM.

TIMOTHY W. HOXIE, Right End.

HENRY S. EATON, Right Tackle.

WILLIAM W. SLOCUM, Right Guard.

RICHARD C. HARRISON, Center.

FRANK F. FOWLE, Left Guard.

GEORGE I. COPP, Left Tackle.

DEAN HINMAN, Left End.

KENNETH M. BLAKE, Quarter Back.

EDWIN T. SAMUELS, Right Half Back.

ROBERT A. FERGUSON, Left Half Back.

JAMIE D. MACBRIDE, Full Back.

#### Substitutes.

ALEXANDER R. HOLLIDAY. OSCAR G. VOGT.

JOHN L. TUFTS. DARWIN ULKE.

EDWARD R. ROBSON. JAMES H. WALTON, JR.

# SCHEDULE OF GAMES.

October 24.	Technology '99 vs. Medford High Sc	hoo	16		7		6-0
October 31.	Technology '99 vs. Needham A. A.		2	2	2	14	4-0
November 13.	Technology '99 vs. Tufts '99 .						4-6
November 16.	Technology '99 vs. Technology 1900						6-0







Hammond-Tuck-Crowell-Roberts Oppenheim-Rebeth Hurd
Neimer Gage-Angus-Pagst-Colling-Jones-Miller
Gilson - Knight - Jewett - Whitman -





Captain.
WALLACE J. PAGET.

Manager. Robert P. Roberts.

## TEAM.

CHARLES B. COTTING, Right End.

ROBERT E. OPPENHEIM, Right Tackle.

ARTHUR A. REIMER, Right Guard.

S. BERWICK MILLER, Center.

WILLIAM J. ANGUS, Left Guard.

HENRY D. JEWETT, Left Tackle.

GEORGE W. KNIGHT, Left End.

NATHAN D. WHITMAN, Quarter Back.

CLAUDE U. GILSON, Right Half Back.

WALLACE J. PAGET, Left Half Back.

FRANK DE M. GAGE, Full Back.

## Substitutes.

THEODORE C. TUCK. WILLIAM R. HURD.
CLIFFORD R. HAMMOND. RUSSELL P. PRIEST.
LOUIS A. CROWELL. SULLIVAN W. JONES.

# SCHEDULE OF GAMES.

October 28.	Technology 'oo vs. Thayer Academy				0-20
October 31.	Technology '00 vs. Haverhill High School	ol			12-1
November 7.	Technology '00 vs. Milton Athletics				6-0
November 10.	Technology 'oo vs. Tufts, 'oo				4-4
November 16.	Technology 'oo vs. Tech. '99				0-6







Chase Underwood Delano Crowell Muhlig Mansfeld Nolte Wing Zimmerman Emery Horlon Aubbard Barber Norton





Captain.

EARLE CALDWELL EMERY.

Manager.

WALTER GUSTAVE ZIMMERMANN.

# TEAM.

JULIUS NOLTE, Pitcher,

MORRIS FRANCIS DELANO, Pitcher.

JAMES SAXTON BARBER, Catcher.

EARLE CALDWELL EMERY, First Base.

FRANK ERASTUS MANSFIELD, Second Base.

JAMES FRED MUHLIG, Third Base.

EDGAR WARREN NORTON, Short Stop.

JESSE BRANCH HUBBARD, Left Field and Catcher.

CHARLES FREDERIC WING, Center Field.

LUTHER ALBERTO CROWELL, Right Field.

#### Substitutes.

HOWARD COGGIN UNDERWOOD, Second Base
IRA MASON CHASE, JR., Pitcher and Field.
RALPH TUCKER HORTON, Short Stop and Field.
CHARLES FRANKLIN SMITH, Field.

#### SCHEDULE OF GAMES.

Anril	8. Technology '98 vs. Hopkinson		 1.	120	10	14-14
	1. Technology '98 vs. Roxbury Latin School					11-12
April 1				10	+	13-6
April 1						10-6
April 2						14-0
April 2	7. Technology '98 vs. Harvard '99				*	9-15
April 2	9. Technology '98 vs. Exeter Academy	9	 100	*		3-9
May	4. Technology '98 vs. Brookline High School	ı l				5-3
May	6. Technology '98 vs. Groton School .					16-14
May	8. Technology '98 vs. Somerville High		 180			5-13
May I	1. Technology '98 vs. Cambridge High and	Latin	 3.53	*		19-8
	o. Technology '98 vs. Technology '99 .		2			15-8

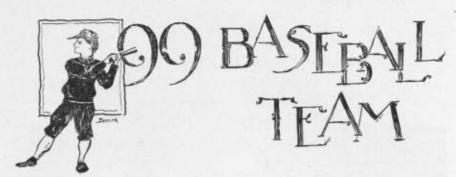




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Holabird Johnston Color Burch Keys Weeks Vogt Hearne Harwood Sherrill

learne 9



Captain.
HARRY MONTIFIX KEYS.

Manager.

MERLE WEEKS.

# TEAM.

HARRY MONTIFIX KEYS			Pit	cher	and	Second Base.
GEORGE IRVING COPP .						
Lane Johnson						
ROBERT GRANT HOLABIRD						
MILES STANDISH SHERRILL						
OSCAR GEORGE VOGT .						
GUY PRENTISS BURCH .						
JOSEPH LOUIS HERN .						
CHARLES FRANK HARWOOD						Right Field.

# Substitutes.

EDWARD ALLEN KEYS.

DUNCAN CRAWFORD MCLEAN.

HENRY KIMBERLY BABCOCK.

EDWARD EVERETT PIERCE.

# SCHEDULE OF GAMES.

April	25.	Technology '99 vs. Brown '99				180	5-16
		Technology '99 vs. Cambridge Latin .					
May	1.	Technology '99 vs. Roxbury High School	-	34			10-1
May	2.	Technology '99 vs. Tufts (second nine) .			,		5-20
May	16.	Technology '99 vs. Arlington High School					10-17
May	20.	Technology '99 vs. Technology '98	14				9-16



# M. I. T. TENNIS ASSOCIATION.

# OFFICERS.

President.

VAN RENSSELAER LANSINGH, '98.

Vice President.

HAROLD OSGOOD AYER, '99.

Secretary-Treasurer.

CHARLES BURTON GILLSON, '99.

Executive Committee.

ASA WATERS GROSVENOR, '98.

GUY PRENTISS BURCH, '99.

GERALD BASIL STREET, '99.

### MEMBERS.

H. W. ALLEN, '97.

H. O. AYER, '99.

F. N. LE BARON, '97.

E. B. BAUMANN, '97.

L. D. W. BENDER, '99.

F. M. BLAKE, '98.

W. D. BRADLEY, '97.

W. Brewster, '98.

G. P. BURCH, '99.

M. F. DELANO, '98.

M. F. EWEN, '97.

W. C. EWING, '97.

W. K. FAIRBANKS, '97.

R. M. FERRIS, '97.

F. FURBISH, '97.

C. B. GILLSON, '99.

R. GILPIN, '99.

A. W. GROSVENOR, '98.

H. W. HATHAWAY, '97.

R. G. HOLABIRD, '99.

S. L. HOWARD, '97.

F. W. Howe, I.

A. W. Jackson, '97.

H. W. Jones, '98.

F. W. KEISKER, '97.

R. E. KENDALL, '98.

V. R. LANSINGH, '98.

R. D. Mommers, '98.

W. PAGE, '97.

J. W. PHELAN, I.

H. H. RIDDLE, '99.

S. W. RIDDLE, '99.

M. F. RICHARDSON, '99.

W. A. Robinson, '98.

E. F. Russ, '98.

R. E. SAWYER, '97.

E. R. SHEAK, '99.

J. F. SICKMAN, '98.

A. D. SPIESS, '97.

J. STONE, JR., '99.

G. B. STREET, '99.

F. R. SWIFT, '99.

E. M. TAYLOR, '98.

G. W. TREAT, '98.

G. R. Wadsworth, '98.

T. Washburn, '97.

E. A. WEIMER, '98.

C.-E. A. Winslow, '98.

The spring tournament was held on the grounds of the Association, May, 1896.

Final Round. — ALLEN WINCHESTER JACKSON, '97, beat MALCOLM FAULKNER EWEN, '97.

The fall tournament was held on the grounds of the Association, October, 1896.

Final Round .- HAROLD OSGOOD AYER, '99, beat VAN RENSSELAER LANSINGH, '98.



Organized November 14, 1896.

## President.

A. W. GROSVENOR.

Secretary-Treasurer.

V. R. LANSINGH.

#### MEMBERS.

W. J. Angus.

R. E. BAKENHUS.

I. H. BATCHELLER.

H. L. BODWELL.

W. BREWSTER.

G. P. BURCH.

W. L. BUTCHER.

E. R. BUTTERWORTH.

H. A. B. CAMPBELL.

L. A. CROWELL.

P. B. COOPER.

G. F. Doty.

I. F. EVERETT.

M. F. EWEN.

W. B. FLYNN.

A. B. FOOTE.

C. B. GILLSON.

H. L. GRANT.

D. E. GRAY.

A. W. GROSVENOR.

M. W. HALL.

C. S. HIGH.

J. H. House.

G. G. HUTCHINSON.

H. W. JONES.

A. S. KEENE.

F. H. LATHROP.

D. MAYER.

G. C. Muslon.

H. B. MAYHEW.

H. M. McMasters.

H. L. MORSE.

C. E. OSGOOD.

A. H. Pugh.

J. C. RIELLY.

E. W. RITCHIE.

E. H. SCHROEDER.

I. S. SMYSER.

H. H. SULLIVAN.

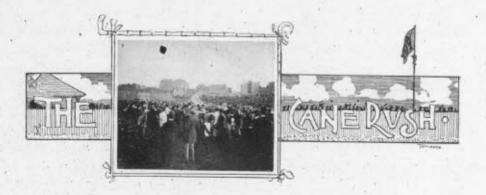
J. F. WENTWORTH.

W. E. WEST.

J. F. WESSEL.



First Run, November 14, '96, from Clarendon Hills. Course, 8 Miles. Second Run, November 21, '96, from Newton. Course, 11 Miles. Third Run, December 5, '96, from Belmont. Course, 6 Miles. Fourth Run, January 2, '97, from Arlington Heights. Course 8 Miles.



Class of 1899 vs. Class of 1900.

Score, 19 to 19.



William Montague Hall.

# WILLIAM MONTAGUE HALL.

ILLIAM MONTAGUE HALL was born in Newton, Massachusetts, February 14, 1877. The greater part of his life was spent in his native city, where he attended successively Miss Wilkins' School, the Bigelow Grammar School, and the Newton High School. Throughout all the length of his preparatory courses he showed a fondness for study, ranked well in his classes, mastered his lessons easily and quickly and found plenty of time to devote to his boyish hobbies.

Though younger than many of his companions, his youthful foresight and level headedness won their confidence, and, combined with his popularity, made him their tacitly acknowledged chief.

His interest in military affairs in his younger days caused him to organize the boy company that Newton residents so well remember,—the Hunnewell Cadets,—which he captained throughout its existence, and which, if it lasted too short a time to admit of a perfect understanding of tactics by its members, certainly left no doubt in their minds as to its leader's proficiency as a disciplinarian. Later, although interested in athletics in general, he was especially devoted to aquatics and became a member of the Newton Boat and the Wabawawa Canoe Clubs.

Aware that his early fondness for boats and machinery was constantly increasing, young Hall decided upon a technical career, and, with this end in view, he entered Cutler's School, in Newton, to prepare for the Institute. He passed his entrance examinations in 1894, became a member of Course XIII., '98, and threw himself heartily into his work and the affairs of his class and college. His ability as a speaker and an organizer was speedily recognized during the first few chaotic meetings of his fellow Freshmen, and gained him his election as their first president.

From the beginning his popularity steadily grew, for his frank and cordial manner, coupled with his fearlessness in debate, appealed strongly to his classmates. Hall came from the preparatory schools with the two-fold determination which inspires every representative Technology man,—of taking his degree in his chosen course, and of adding to his professional knowledge everything which he felt could tend to "round him out." He was a constant reader of the scientific papers, and took great interest in history and biography. He possessed remarkable powers of concentration, and seemed to be able to read or study regardless of the fact that even the very room in which he sat might be full of noisy comrades. He was a keen observer, and, indeed, as his father once said of him, "He seemed to be constantly storing up knowledge for future use."

Hall was initiated into the Fraternity of Phi Beta Epsilon in his Freshman year, served on the Institute Committee for two years, was secretary and treasurer of the 'Varsity Baseball Association during the year 1895–1896, and was elected a member of the executive committee of the Tennis Association and of the Technology Yacht Club. Election to an office in a Freshman class at Technology is indicative of a man's good fortune in being able to create a favorable impression upon his fellow-classmen, rather than of his ability to render them efficient service, and Hall's re-election to the presidency of Ninety-eight in her Sophomore year was a significant compliment.

Early in October, 1895, Hall became a member of the editorial staff of *The Tech*, and shortly afterwards took charge of the Athletic Department of the paper. His interest in class affairs in no way abated, nay,—it increased; for throughout his second year he labored constantly for the unity of Ninety-eight, and she in turn, in the spring, renewed her faith in him by giving him her solid vote for the Electoral Committee of TECHNIQUE; and had his life been spared he would have been the Society Editor of this volume.

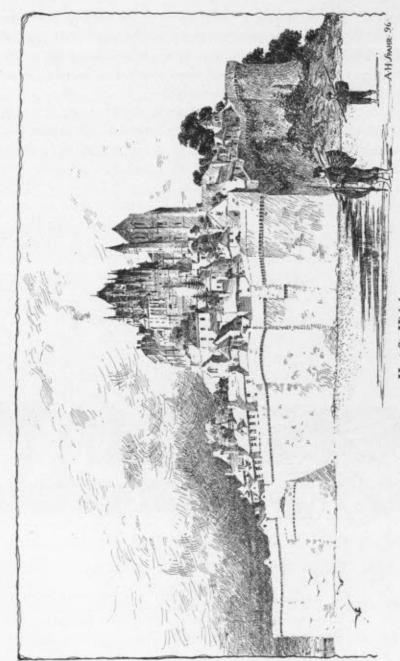
The Institute had hardly closed last year when Hall began to get his cutter into readiness for a cruise along the coast of Maine. The Daisy went into commission while lying off City Point, on Thursday, the eighteenth of June, and a short time after the ensign and the burgee of the Technology Yacht Club were hoisted, Hall fell from the rigging to the deck, so fatally injured that his death occurred on the following day.

His sudden end was indeed a severe blow to his fellow-workers; the Junior year of Ninety-eight was entered upon with mingled feelings of sadness and helplessness; and even now, although nearly another college year has passed away, it seems almost inconceivable that they can never again in this life see his face and hear his voice.

Ambitious and enthusiastic, he gained their attention; manly and a natural leader, he commanded their respect; generous and sympathetic, he won their love; honest and faithful in all things, holding noble ideals, ever ready to champion his family and his friends,—such was he who was endeared to upper and lower classmen alike, and known to all the college as "Billy" Hall.

S. L. H.





Mont St. Michels.



### HE ARCHITECTVRAL SVM-MER SCHOOL ABROAD

ITH throbbing hearts and groined vaulted yells the two divisions of the illustrious twenty-one started for the Old World: the North Wing leaving June 3d, on the palatial cattle steamer Cestrian; the South Wing risking their lives on one of the Cunard boats. The weather was good, but grew a little rough at times, causing the brighteyed youths to stand by the rail and view with flashing orbs and heaving lower chest the mighty waves as they passed under the ship. Some people enjoy the sea; others would give as high as \$7.32 to be ashore.

After a very rapid (?) passage, the three thousand sheep, eight hundred cattle, two professors, and eight students were landed at Liverpool. Several days were spent in going to London, Chester and Oxford being visited en route. At the metropolis the shattered remains of the second division were embraced. Five days were then spent in London, but to describe what was seen would necessitate a cold and very lengthy crib from the guidebook,and six weeks. London appears to the person who sees it for the first time as overpoweringly large. It seems a hopeless undertaking to try and "sight-see" the place in five days; but this task was accomplished in quite a thorough manner by the party. Four days were spent in wheeling to Southampton by the way of Hampton Court, Esher, Guildford, Ripley, Godalmung, Compton, Elstead, Waverly Abbey, Farnham, Arlesford, Winchester, Salisbury, and other flag stations. Besides seeing very picturesque bits of architecture, two good cathedrals and some good half-timber work, the students acquired an acute knowledge of how to mend tires, play English billiards, and dance with English barmaids.

The trip across the Channel was very quiet, and the bicycle tour in France was started from Havre the morning of the 25th. Many wild and

<sup>\*</sup>The Editors wish to disclaim all responsibility for the English of this article. It was written by a Course IV. man and is printed intact.

pathetic attempts were made at the language, the most picturesque forms of which appeared in Jackson's stock phrases: "Fermez la porte," and "Avez-vous un crayon," which, on being hurled at the inhabitants, reaped great reward and renown,—also a few bricks.

From Havre, the route lay through Lillebonne, Caudebec and Jumièges, to Rouen. At the latter place the Cathedral of Notre Dame, the Palais de Justice, the Jean d'Arc Statue, and many other very interesting monuments and buildings were seen. Considerable time was also spent in hunting down a dictionary. From Rouen the party wheeled through Elbeuf and Berney. Some of the fellows were lost before reaching the latter place, and, through the ignorance (?) of the peasants, had to spend a day or so scorching up and down the map of France finding their grief-stricken comrades. The next town was Lisieux, at which place some of the students found their reports from Tech., and many a tooth was gnashed. Lisieux proved very interesting with quaint narrow streets and a good cathedral. The costumes of the men peasants consisted of a navy blue night-gown and a pair of shrimp pink socks, one end of which was covered by wooden shoes, or apses, of the gothic construction. The ladies wore bloomers besides the above.

The next places visited were Creve Cœur and Caen, at the latter of which was a good cathedral, with a beautiful renaissance tower. yeux, St. Lo, Contances, Granville, Ouvrances, and Mont St. Michels were the next in order. At the first place the party felt its inability to make enough noise, it being the Fourth of July. At the last town so many points of interest presented themselves that the day and a half so generously allowed seemed very short. It would be impossible to describe St. Michels here, even in the briefest manner. Fougères, Vitri, Argentri, Chateau Gontier and Angers were then passed through. At Angers the party witnessed the French celebration of the 14th of July,-the anniversary of the fall of the Bastile. After Angers came Saumur, the West Point of France, Chinon and Azay le Rideau. The party arrived at the latter place in time to see a wild-eyed Frenchman smash into a wall, It was the same old story,-trying to coast around a very acute angle, bounded on three and one-half sides by knife-edged stone walls, the problem being to go in and out of the same opening without nicking it; also without meeting death. We picked up the hash that was once the Frenchman, and went our way with tears on our faces.

At Azay le Rideau is one of the most perfect examples of renaissance work in France. Loches, the following town, was also fraught with interest on account of the dungeons and queer little church, and also on account of the use of a set of brass band instruments, hired for a certain occasion.

Chenenceaux, another beautiful chateau, was visited; then came Amboise, Blois, and Chamboid. After leaving the Loire Valley the party struck for Paris, stopping at Chartres and Versailles; and at Paris broke up—that is, not quite broke, but pretty near it. To describe this trip in such limited space necessitates the leaving out of details which are of frenzied interest to some of the pilgrims. One of these details, about which the air was generally blue, was the puncturing of a tire as the rest of the party was disappearing over the brow of a neighboring mountain! At such times man does not wish to be entirely alone, but yearns to hit some animate object with a large brick.

The stays in Paris were of varied lengths, being in direct proportion to the number of plunks; this law holds up to the breaking point, after which the tourist cables for money. However, everyone had time for at least a glimpse at the most important points of interest. Too much credit and thanks cannot be given to Professor Homer, who was the originator of the trip. The admirable way in which it was planned, and the careful personal attention he gave to its requirements, were altogether successful in making of the tour a most enjoyable, as well as instructive outing.



### THE TECHNOLOGY GLUB.

HAD known Mathews at home, before he went to Yale and I came to Technology, and he had always given me a hearty welcome whenever I passed through New Haven. I was very much pleased, therefore, when he turned up in Boston for the Harvard-Princeton game. We watched the downfall of the Crimson together, and then I took him to the Club for dinner. He was

duly impressed by the crisp English steward, and by the distinguished company at some of the little tables in the dining room, where professors, alumni, and undergraduates were seated together indiscriminately. He failed to recognize Dr. Tyler at first as the full back of the Faculty football team in the '96 TECHNIQUE, because his beard was at that time under

its biennial eclipse; but when the Secretary asked me some question across the table about the game, he looked rather awed, and whispered, "What a jolly, friendly footing you're on with your professors at Tech."

After dinner, when I took him upstairs and presented him to Professor Sedgwick, Mathew's Yale arrogance began to



show visibly. The long "Common Room" was looking its best. A bright fire sparkled on the hearth and cast a flickering light on the walls, with their clear engravings and soft water colors. The fine full

length of President Rogers over the fireplace seemed to look benignantly down upon us. The old football championship banner, won by Technology in 1887 and 1888, hung in front of the bookcase, and testified to past athletic greatness.

I was dilating a little upon the advantages of a technical training to the eye and hand, and as I heard the click of billiard balls upstairs I took Mathews up, to show him what we could do in that line. We found a young graduate and a professor "pounding the ivories," and I was able to demonstrate with clearness the advantages of a knowledge of angles and



the elasticity of solids. We looked into the pretty little library, where Vandyke's horrible dissection picture unpleasantly suggests the Biological department, and into the quiet card room, where a game, presumably Old Maid, was in progress.

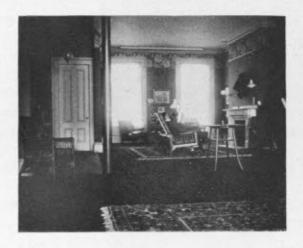
"How was all this done?" Mathews

asked, when we were once more in our armchairs near the fire with our cigars puffing merrily.

"Public spirit on the part of old grads and some of the profs," I replied. "The scheme was first suggested in the executive committee of the Alumni last January, and in six months it was carried through. Of course they keep the control mostly in their own hands; only sixty out of the six hundred members can be undergraduate at present, and those are Seniors or very distinguished men, like Editors of Technique. This tone of old-world respectability has its drawbacks; for instance, you cannot get anything to drink more inspiring than pasteurized milk—but we rather like it. The dignity, I mean, not the milk. The fare you have sampled; the billiard table is new and lively; the bedrooms which one can get for

the night are cozy; and the smoke-talks and informal meetings of various kinds have been very successful. But I telephoned for some seats at the Castle Square before dinner, and as it's eight o'clock now we'd better start."

"I've heard that you Tech men hadn't any college spirit, but I think this Club shows a good deal," said Mathews, as we stepped out into the brisk night air.

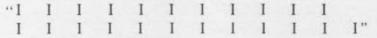


## Grinds



Abit, a very palpable hit





- "Theory of Expression," by Arl- B-t-s.

C. R-NSH-W, '99: "Now, 1900, suppose you should start to dig a hole straight down into the earth, where do you think you would come out?"

INNOCENT C--P-R, 1900: "Out of the hole, I suppose."

### VERY QUEER.

How is it, Th-mps-n, '98, Cuts "Maur-ice" every day? And yet 'tis true, oh, cruel Fate! His mind must quick "De Kay."

WR-GHT, '98 (after finishing a translation which needed considerable assistance): "Hard, isn't it?"

"JUSTIE" ERH-RDT: "On me,-yes."



GEOLOGICAL DEMONSTRATION.

xy=Crust of Earth. o x=Crust of F--RB-NKS, '97.

PROFESSOR M-RR-LL: "Now I will devote a few minutes to the discussion of my last lecture. Any questions?"

W-LL-c-, '98: "Was there any special point you wished to bring out in the last lecture, Professor M-RR-LL?"



'98 Burying Ground.

### A SUGGESTION.

THE F--NC- Mission Band: To spread throughout Technology loving seeds of kindness and gentleness of spirit, as exemplified in our adored and worshiped idol.

Mr. P--rs-n: "What is the universal negation?" C-rt-s, '98: "Unprepared."



### N-LT-'S ILLS THIS FALL.

Broken arm (1), sprained leg (4), cold (68), strained leg (17), neck (7), brain (0), sore foot (22), feet (9), tired (1,137), consumption ( $3\frac{1}{2}$ ), last stages (1), sore toes (12), wrenched hand (87), foot (119), bruises (2,273 or 4), fractured kneecap (1), water on the knee (5), nose broken ( $\frac{1}{2}$ ), teeth knocked out (21), etc., etc., ad infinitum.

PROFESSOR B-RT-N: "The Comstock is the hottest mine that I know of. There may be hotter ones, but I do not know anything about them."

### HEAT NOTES.

Specific Heat of '97 Technique.

W. I. T.=O.



"Button, Button, whose's got a Button."

### AS WE SUPPOSED.

Professor S-dgw-ck (in Botany): "Why! this is the easiest thing in the world. You don't have to know anything to know this; that's why I am teaching it to you."

### IN THE NURSERY.

PROFESSOR L-Nz-: "Mr. Br-mh-ll, you may take the cradle."

### SECOND SIGHT.

C. W. P-ND-LL: "Am iN IT?"



### DRESS REFORM.

Professor P-P-: "Now you must all provide yourselves with overalls for this laboratory work" (noticing a blushing Co-ed), "or aprons, as the case may be."



### "THE SPIRIT OF '76."

PROFESSOR R-PL-Y (in Taxation): "Where are the other members of this class?"
We can't have 'taxation without representation."

### ATHLETICS AT M. I. T.

"The M. I. T. Athletic Association held the most exciting meeting in its history on the thirteenth of March. Mr. A. W. Grosvenor, after a hot fight, was chosen President. In the contest for Vice President Mr. Asa W. Grosvenor came out ahead. The balloting for Secretary ran very close, but Mr. A. Waters Grosvenor had the best of it. Mr. Asa Waters Grosvenor was elected Treasurer. It is said that a large body of voters had agreed upon the nominees elected before the meeting."



'73. Mrs. Professor Ell-n H. R-ch-rds, having duly reached the time limit, was admitted to the Faculty at the May meeting. It is unfortunate, however, that Professor B-t-s could not conscientiously abide the decision, and remain with us.

'77. Ex-Professor F--nc-, who left M. I. T. under such unfortunate circumstances, has just sailed for China, where he goes as a missionary to Chin Whiz. His religious fervor and gentleness of manner will undoubtedly endear him to all the natives.

'84. Dr. Tyl-r's new book, "Liquid Entertainments," has already passed through forty-seven editions, and is now entering upon a period of oblivion. He anticipates an elementary edition.

? J-ck P-ch-n returns next year to take Applied, and hopes to graduate with '5. His book, "A History of M. I. T. since its Foundation, by the Oldest Resident," is intensely interesting, owing to the endearing personal reminiscences of the better known professors.

'96. Mr. B-nj-m-n H-rd has recently taken charge of the Roxbury Distillery, which has gone into liquidation. He hopes to bring it through by methods learned while at M. I. T.

'97. The Rev. G-org- H. McC-rthy has accepted a call to a fashionable New York church, where his suave and genial manners will doubtless make him unusually popular.

'97. Mr. K-nd-ll F--rb-nks has recently become connected with the Gas Works. He is said to be doing extremely well.

'97. Mr. H. D. H-nt's new play, 
"Mamie's Secret," will be produced the 
coming week by the "Daisy Whooper 
International Burlesque Company," direct from London, at the Howard. Mr. 
H-nt's success has been phenomenal. 
At present he is engaged in writing an 
operetta, to be brought out at the 
Nickelodeon soon.

'97. Mr. Schw-rtz has lately joined the Real Estate Exchange. We hope his transactions will be more frequent than when at M. I. T.

'98. Mr. E. H. F-g-rty has arrived home from his course on the Marjorie. She has proven herself much swifter than her maker.

'98. Mr. G. A. H-tch-ns-n was recently elected Alderman from the 17th Ward of South Boston. Mr. H-tch-ns-n's ability is unsurpassed as a politician. '98. Mr. Ev-r-tt N. C-rt-s, who studied for law after leaving the Institute, has gone upon the stage, and is making a great success in "The Witty General." The lady who supports him is charming.

'98. A quiet wedding was celebrated in Chelsea, on February 22d, at which Mr. W-ll--m T-w was the fortunate man. This is Mr. T-w's third venture since graduation, and we hope that he enjoys his winters in the bracing climate of S. Dakota.

'99. Mr. Edw-n Sh--k has conducted the coming French Ball, modeled after the New York prototype, most ingeniously. Mr. Sh--k's experience gained while at Technology in the conduct of such affairs has been serviceable to him, no doubt, and the affair will be highly elevating.

'99. Mr. R. W. B--l-y has been appointed corporal in the Army. He informs us that he still retains his oldtime popularity.

'99. Mr. E. H-sm-r H-mm-nd has, by special arrangement with the Bird, had a lounge placed in the Cage, where he can rest between recitations. He says that the stone steps are too chilly.

1900. The sad accident which befell Mr. M-lt-n H-ll, the doctors hope will not prove fatal. A safe fell six stories and struck him on the head. Other than a severe shock he has received no injuries.



The Basket Ball team was defeated by a score of 40 to 0 by Wellesley, last Thursday. This is an improvement over last year, and shows conscientious work of the men. Besides the lack of training tables, the team has been badly crippled by the loss of two men who were laid out in the game with the Emerson College of Oratory team. Mr. M-nsf--ld is still suffering from the effects, but is improving rapidly.

The annual fair and bazaar, held last week, to make up the deficiency of the Football Association, was a grand success. Mr. C. H. L. N. B-rn-rd was inimitable as floor director. Many ladies attended.

Baseball may be resumed at Tech next Spring.

A large number of students went to the "Gym" last week to use a piece of apparatus which, it was rumored, had been repaired. The rumor was unfounded.

The Board of Graduate Supervisors have decided that "Co-eds" will be allowed to enter the cane rush at their own risk.

### THE LIGHT WENT OUT.

Professor Cr-ss (speaking of inventor of incandescent lighting): "His career was unfortunate. Shortly after he died, and didn't push his inventions any further."

Professor H-ffm.n: "This process must be carried on in glazed underwear, or er—earthenware." (Wild consternation in class.)



### ARN-LD, '98.

With nice little musket and buttons so bright, He drills and he marches from morning 'till night. If he thinks that the Captain can give him S. B., He'll find he's mistaken as sure as can be.

PROFESSOR P-P-: "You must be very careful not to spill any of the acid on your clothing, because it will burn holes in it, and make the color of the holes red."



### ONE OF MANY.

"My son is much elevated by Shakespeare."-Arl- B-t-s.

### REPARTEÉ.

STUDENT: "Dr. W-lk-r, will you kindly tell me what this chemical is? I can't quite get its composition."

DR. W-LK-R: "No; I don't give a ----, and don't believe the Lord in heaven knows."

STUDENT: "Oh! I knew he didn't, but I thought that you might."



How Children do Grow!

"Снет" DR-к- (translating): "She sank up to her knees in the mud, and was gradually sinking ——"

PROFESSOR V-G-L: "You've gone far enough, Mr. Dr-k-."

### HEROES.

George H-tch-ns-n! George W-sh-ngt-n! Both mighty names are these: The one lays low opposing cliques, The other laid for trees.

### AT AUSTIN & STONE'S?

Dr. R-pl-y: "I have a friend whose father was a Chinaman and whose mother was a Hottentot."

### Антниороводияв Ахіомь.

LARGE head does not indicate greatest intellect .- H-ffm-n.

HAIR is the most variable feature of the human species .- F-g-rty.

Long, narrow heads do not indicate a low mental capacity (Tech. men have a very narrow set of heads).—Arl- B-t-s.

Special conditions make the Island of Cuba somewhat less healthy than the adjacent islands.—P. S-nch-z.

REDHEADS are hard to classify .- Sn-w, '99.

In the negro a sleep is prevalent which eventually causes him to surrender life. It has never been seen in the whites (?).—Bursar.



Professor L-nz-: "The rest of this book of Gilman's is filled up with explanations of why things ought not to have been as they were, if they had been different."

THE DEPARTMENT OF THE INTERIOR:
THE LUNCH ROOM.

### AT THE PARADE.

R-G-N-LD T-B-Y: "Whaz-ze-mazzer-wiz-ze Alumni Coash?" From the Crowd: "Only half full."

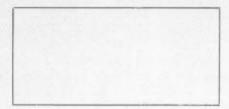


### POOR ROGERS.

KID ONE: "Is dat de Hahvud joint?" KID Two: "Naw; dat's de gas house!"

### AN EXCEPTIONAL GATHERING.

Below is an excellent cut of one of Technology's rousing football meetings.



ACCOUNT of the same in the "Wrech":

"Probably the most enthusiastic meeting that the Football Association ever held, occurred on Saturday. Owing to the extensive advertisement through the columns of the 'Wrech' an unprecedented crowd attended, and the subscriptions were accordingly munificent, etc., gush, etc., gush, etc., —."

R-M-RY, '98: " Sported a Henry Clay head without the Henry."

### RELIGIOUS TRAINING AT THE INSTITUTE.

It gives us great pleasure to make the exclusive announcement that at last the Faculty are considering the proposition made to the Institute by interested parties, some time ago, to establish a course in Sportology. The lack of spiritual oversight and care for our students, which is so generously provided for in most colleges, was felt early in the history of Technology, and in order to provide the necessary accommodations for this, the Brunswick Hotel was built and a portion of it fitted for the purpose. For some years an optional course has been given, and has been well attended. The establishment of the Technology Club, during the past year, has brought the matter once more to the front. For a full enjoyment of the privileges of this institution such training is necessary, and the limit placed upon the number of undergraduate members makes some method of choice imperative. Hence, the Faculty have decided to make the services in the Chapel compulsory. For all regular students the work will consist of six hours per week, lectures and laboratory, and one hour preparation. For Courses IV. and IX. double time and special work is required. Annual and semi-annual examinations will be held by a special arrangement with the Technology Club, and no student shall be eligible to membership without a clear record in this course.

The services in the Chapel will be under the charge of Professor Cl-ff-rd, together with the present popular instructor and his assistant, the former being considered a member of the Faculty with the rank of Associate Professor. In order that the time may be arranged to the best advantage, no provision will be made on the tabular views for this subject. Students, however, must make due allowance for it on their section cards, giving it the preference in case of a conflict.

The course will include a thorough study of Beerology, Cocktailography, and Smokeism, illustrated by experiments which each student is required to perform, as well as the elements of Billiardism and Poolology. Students desiring to spend extra time may have free access at all hours of the day or night.

For further particulars get special circular on "Chapel" at the Secretary's office.



M. I. T. YACHT CLUB, April 1, 1313, Off Marliave's.

Professor S-DGW-ск: "Can anyone tell me what use leaves are?" E. R. Sh--к, '99: "Ask Adam."



### AT THE YACHT CLUB.

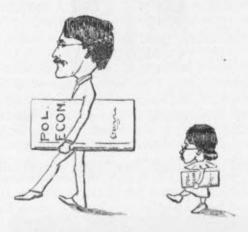
S. L. H-w-RD: "Say Sw-s-y, do you suppose that Sm-th would get hot if I jollied him?"

Sw-s-Y: "Don't know. Boiling point depends upon the nature of the liquid."

Dr. S-DGW-CK (to new class): "You may take the first ninety pages for next week, and we will finish the book the week following."

### A SENIOR PROBLEM.

CALCULATE the number of foot pounds to every one of G-tty's jokes.



How doth the little D-w-y do? Doth he do what his papa do? Do 'e? Well, I guess he do. Don't you think he do?

### POLITICAL ECONOMY.

- 1. Is a professor of Political Economy a producer? If not, has he any value?
- 2. State and explain the relation between rents in Cambridge and the salaries of chorus girls in Boston.
- 3. How does home production affect the income of an instructor at M. I. T.?
- 4. Give a concise and unbiased discussion of the Silver Question, mentioning the views of the author, the relation of prices to demand, the advisability of attempting it alone, and a summary of the discussion by the champions of both sides.

TIME: 10 minutes.

### THE BIRDIE READING BOOK.

LESSON I.



Here are men. What is a man? A man is a grown-up lit-tle boy. Is the lit-tle one a man? Yes, per-haps. What is his name? His name is Fred-er-ick. What is he called? He is called Fred-dy. Why is his head so large? He can-not help it. Did it grow that way? No; it was made so. What does he hold in his hand? He holds a book in his hand.



He reads the book some-times. Does he stud-y? Oh, no; he is a Gen-e-ral! Do the Gen-e-rals ever study? Ver-y sel-dom. Does the man talk? Yes, the man does talk. What does he say? Very lit-tle, usu-all-y. Is he nice? No; he is very fresh. Was he al-ways a big man? No; he was once a lit-tle boy. How long ago was he a lit-tle boy?

Two years a-go he was a ver-y small boy. Does he love his teach-ers? Yes; he loves his teach-ers ver-y much. Who does Fred-dy play with? He plays with Er-nest. Is Er-nest a sweet boy? Yes, a dear boy. Is Er-nest pop-u-lar? Yes, some-times. Does Er-nest work? No; he is also a Gen-e-ral. Why do the Gen-e-rals not work? They have a snap course. Do they think they work? O Lord, yes! Do Fred-dy and Er-nest work get turn add down? Yes, they were once turn add down? What

nest ever get turn-ed down? Yes; they were once turn-ed down. What do you call a man who is turn-ed down? A Pol-i-ti-cian. What do you call one who is not turn-ed down? Oh! he is a Wiz-ard.

ER-NEST SWEET FRED-DY SASS-Y GEN-E-RAL SNAP

HEAD HUGE POL-I-TI-CIAN Dr. W-Lk-R (when C-lc-rd breaks a beaker): "I wonder why these Course III. men are so irresponsible!"

S--D-NST-CK-R: "That's easy. They're minors."



H. D. H-NT, '97: "Now, why do you not have Ed. Sh--k on your committee?" Ch-s. BR-DL--: "Well, don't you think he swears a great deal?"

### IN THE SHOPS.

R. W. St-bb-ns, '99: "Mr. Sm-th, my physician has forbidden my doing any brain work this year, but of course that won't prevent my continuing your subject."



"By this you will readily see."

### TESTIMONIALS.

The following testimonials received by the Dosem and Kilham Company of Quacklenburg are given space in this portion of the book on account of the public interest attaching to their authors, and also on account of a large sum paid by the Company.

DOSEM AND KILHAM, MANUFACTURERS OF THE WONDROUS SLEEP RESTORER:

Dear Sirs,—Allow me to express my gratitude for the service which your Sleep Restorer has rendered me. Before I used it I was much troubled with wakefulness, sometimes being unable to go to aleep all day. Since a friend of mine, Mrs. Bird, who like myself is in the checking business, recommended your specific I have had no further trouble. I also am now constantly visited by pleasant dreams of young men paying term bills, etc.

Restfully yours,

Albert MKeright

DOSEM AND KILHAM, SOLE PATENTEES OF THE HAIR AND WOOL GROWER:

Gentlemen,—When I first entered the Institute of Technology I was much troubled by loss of hair, owing to my fear of Mr. F. nc., to my chemical experiments, and to the conduct of my many lady friends, who not only pulled my hair, but my legs also. I was in a deplorable condition. It was then I saw your advertisement, which was as a beacon light in a storm. Thanks to the constant use of the hair renewer, I am now able to boast the most noted head of hair in the annals of Technology. Only two weeks ago I received a letter from Austin & Stone, who offered me the position of Circassian girl; but I firmly refused, thinking such an occupation unworthy my dignity, and preferring the pursuit of knowledge to that of histrionic fame.

Gratefully yours,

E. H. Hogerty

DOSEM AND KILHAM, PROPRIETORS OF THE CLEOPATRA COMPLEXION CEREAL:

My dear Sirs,—How can I thank you adequately for the wonderful change that has been wrought in me by the aid of your invaluable remedy? Before I heard of your divine medicine I was in the habit of using daily 2 gills of rose water, ½ lb. of borax, 1 box of glycerine, 12 ounces of arsenic, and a steam vaporizer. I even went so far as to wear a complexion mask to bed. What I then accomplished by hours of assiduous toil, I am now able to do in no time at all, simply by eating your medicated food. My friends tell me I am growing more beautiful every day. I inclose my picture; use it as you see fit.

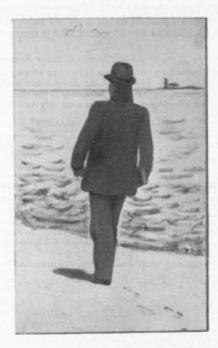
George Herbert Mr Carthy.

DOSEM AND KILHAM, MAKERS OF THE GREAT FRATERNITY NERVE TONIC:

Gentlemen,—If indeed you are such: I should like to know the reason of the use of my name in advertising your vile concoction. I have never used it, never will use it, and do not believe there is any such remedy. I'll have you know that I belong to none of the chappy and imbecile fraternities of the Institute, and would not if I could. Moreover, as I am as healthy, hearty, and as good looking and good natured a man as any in Tech. I have been compared to Daniel Webster as an orator. Send your representative to me, and afterwards you will have an opportunity to try your senseless remedy on one of your own tribe.

Proctor Lambert Songhesty

PROFESSOR V-N D--LL: "No, Mr. H-sbr--ck, you do not use 'lieber' in that instance; it is generally used when you are speaking of things you hold in your arms."



"You're not the only pebble on the beach."

PROFESSOR CR-ss: "In looking this up the other day, to find something that I did not know, I found it a very hard problem."

### COURSE IX.

H. D. H-NT, '97: "Is that true, Dr. D-w-y?"
D-w-y: "Oh, no; but we use it in our course!"



### WIND.

PROFESSOR CR-ss (in lecture, pointing to '99 men): "Now if we had some gas tanks like those yonder, ——" (righteous indignation by the members of cane-rush committee).

 $\label{eq:pd} p \ d \ Q = n \ (it) \ + \underbrace{H. \ T.}_{A. \ M. \ K.} (OCT)^{10} \ + \underbrace{d^{am}}_{FF}$ 

G. R. Anth-ny: "Professor, how is that equation derived?"

Professor P--B-Dy: "Oh! that is one of the things I invite you to recognize and admit to be true."

### DON'TS FOR TECH FRESHMEN.

Don't take 13 subjects. Don't cut drill 13 times. Don't get on THE TECH. Don't whistle to the Bird. Don't ask questions in Physics. Don't have 13 petitions refused. Don't call N-rm-n, " Professor." Don't attend 13 theatres per week. Don't attend chapel 13 times a day. Don't take 13 drinks in an evening. Don't reach lectures 13 minutes late. Don't wear long cuffs at exam. time. Don't pay your bill on October 10th. Don't go to Military Science lectures. Don't smile when " Profs." say R-dler. Don't receive 13 notices from H. Tyl-r. Don't call on the Bursar without a bed. Don't get gay with the lunch-room girls. Don't sit behind a big man at exam. time. Don't see Ch-rl-y Cr-ss over your right shoulder. Don't fail to be at home when your report comes. Don't contribute to other than your own class teams.



### BRANDED.

Too bad! too bad! poor H-rby B-rs; It is an awful burning shame, That your old failing thus appears So evident within your name.

### CHEMISTRY SIMPLIFIED.

H-R-c- Sm-TH, '98: "Dr. W-lk-r, how shall I dissolve this base?" Dr. W-LK-R: "Spit on it! "

### WHAT WE ARE COMING TO!

Name	(When full, take care wi	ith capitals and bu	nctuation.)
	(Pr ven jarr, rane vare w	ne cupital's and pa	
Age			
	(Co-eds or	er 60 exempt.)	
Last Resi			
	(Good	l looker ?)	
Do vou in	nbibe?		
	a Wby? b Wben? c Wbat?	4 meets every Satu	rday at 12.
Size of sh	ne		
01(00) 00	(For ac	reage see Bursar.)	
Are nou s	narried?		
nie you n	a When?	b Why?	c What?
Llama non	a family?		
riave you	(Se	e Arl)	
Do you us	e the following: Lydia	E. Pinkham's	Pills, Allcock's I
ous I	Plasters, or Dr. Yanke	r's False Teeth	?
Have you	ever taken English? (What anest)	Sti betic did you use.)	idied it?
Have you	seen Anna Held?	Under what	circumstances?
Ever bear	d of L-n-s, F-g-rty	, the Bird, D	escrip, Flunk, H

# БРЕСІЯ ТАВИГАВ УІЕЖ.

a. Sportine Kuss, Course

11-12	Tech Office,	Sleep.	Chapel.	Chapel,	Freshman Chemistry.	Phys. Geog.
12-1	Water and Sewage.	Lunch Room.	Physiol.	Pol, Econ.	Freshman Chemistry.	Old Elm.
1-2	Lunch.	Tech Board,	Miners' Union Meeting.	Lunch.	Frank Lock's.	Old Elm,
2-3	Jake Wirth's.	Gym,	Lyceum.	Technology Club.	Frank Lock s	Open Date.
3-4	Jake Wirth's.	Gym.	Lyceum.	Technology Club.	Frank Lock's.	Open Date.
4-5	Metcall's Drug Store,	Technique Board,	Behind the Scenes.	Technology Club.	HOME.	Open Date.

This card shows time at which I am supposed to arrive at and depart from various places; but neither arrival nor departure (especially Wednesday and Saturday) is guaranteed, nor am I responsible for the same.



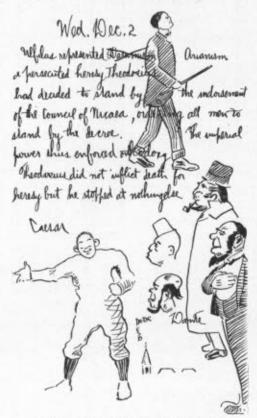
Respectfully yours,

Year.

Course

PROFESSOR CH-NDL-R: "You gentlemen may think this point very large, but I assure you that it takes a pretty large one to be seen by part of this class."

MR. H-MBL-T: "Well, Mr. P-nd-ll, are you all here?"



History made easy by a new Dodge.

Professor X: "When the distance between the carbons becomes too great, they separate toward each other."

### A POPULAR METHOD.

PROFESSOR P-B-DY (in explanation): "There are three methods by which a result may be secured,—first, by calculation; second, by calculation and guess work; third, by guess work alone. You may all go to the board."

(Ten minutes elapses.)

"Now, Mr. P-ch-n, how did you obtain that result?" P-ch-n: "By the third method."

### A CONVERSATION.



WALKER BUILDING: "Good morning, Rogers; how do you feel?"

ROGERS BUILDING: "Oh, pretty well; I'm much better now, since I've gotten my new Hawley down-draught furnace; don't get so many coals. And you?"

WALKER B.: "O, I'm as happy as Maclachlan; I've got a corner in Clarendon Street."

ROGERS B.: "Stationary-eh?"

WALKER B.: "Yep. Say-do you know I envy you sometimes? Of course you're a little hampered in your 'upper story'-with L-n-s and 'Free-hand Ch-rl--' --- "

ROGERS B.: "Well, I'd rather have even them than an old chemical Vatican—"
WALKER B.: "What?—oh, I see! But T-mmy 'ain't so bad,' except when he
wants things immej—right off, you know; but you with Ch-rl-- Ad —."

ROGERS B.: "O, he isn't here much now; we've got a new machine, that practically does away with him."

WALKER B.: "That does away with dear old Ch-rl--? Well, I never-"

ROGERS B.: "Yes. It's got a megaphone attachment, and just yells out, 'See the mass!' every ten seconds."

WALKER B.: "Well, that is an improvement. Tech's a great place, ain't it? We've got the 'Greatest Show on Earth — '"

ROGERS B.: "You mean in The Tech office?"

WALKER B.: "Oh, no! The B-rn-rd Bros. Circus—continuous performance 9 to 4—. By the way, a good joke: Freshman named H-ll got into the Margaret Cheney Reading room, thinking it was Ch-rl-y's recitation room; smelt the perfume, you know."

ROGERS B.: "Ha! ha! And that reminds me, 'Justie' Erh-rdt came over here yesterday to see H-rry about getting his room changed. Says that with the Chemical lab. above him and Ch-rl-y below him, the odors are simply suffocating."

WALKER B.: "I can't blame him. Heard quite a racket over in you yesterday; what was it? Did Arl- tell one of his stories?"

ROGERS B.: "No; it was only in The Tech Board. F-g-rty, '98, had just sent up another 'joke' for publication."

WALKER B.: "What, again? What was it this time?"

ROGERS B.: "Something about an extra big lesson Dr. V-n D--ll gave his French section, and a remark one of his pupils made."

WALKER B.: "What did he say?"

ROGERS B.: "According to F-g-rty — he said it was V-n-d--ll-ism!"

WALKER B.: "Ha! ha! ha! that's good."

Rogers B.: "Be careful; you will annoy the Bursar."

WALKER B.: "Oh! wouldn't do that for the world. How is he, anyway?"

ROGERS B.: "His family cares take up a lot of his time, but with Arl-'s assistance he pulls through. He had an incandescent lamp put in the Cage the other day."

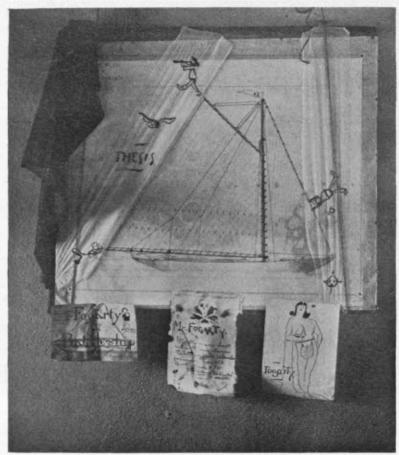
WALKER B.: "So she could get a 'Bird's-eye view' of the letter rack?"

ROGERS B.: "Sh-sh-sh! I hear the Institute Committee stirring. We must not disturb their slumber."





A GIBSON GIRL. (NIT.)



"The Marjorie."



A FIRST YEAR " DESCRIP." PROBLEM.



AN "EXAM."

EDW-RD S-M--L CH-P-N, S.B., Ph.D., Professor of Chemistry and General Knowledge.

M. I. T., '98, V.

Assistant Professor in 1896; In charge of Course V., 1897; Professor of Chemistry, 1898; General supervision of M. I. T., in 1898; Deacon of Y. M. C. A., from 1894 to 1899; Professor in charge of "Sportology," 1900; Prize Winner at Technology Beauty Show, 1898; Lecturer in Lowell Course on "The Knowledge of an Unsurpassed Brain," 1897.

Author of Entertainments in Freshman Chemistry (13th edition now in press, and an elementary treatise in preparation). Short paper on the "Hydroxymethylation of Para-sulpho-benzene-azo-dimethyl-aniline," etc., etc., etc., etc.

Author and Editor of the New Encyclopædia Britannica (72 volumes).

Residence, 4114 Grind Row, Chelsea.



J. S. P-ch-n: "When I leave Tech."

### TRANSLATION.

PROFESSOR D-PP-LD (who has forgotten his book): "Mr. St-w-rt, won't you let me take your book?"

ST-W-RT, 1900, hesitates.

Professor D-pp-ld: "Oh, I can read your writing!"

### SENIOR CLASS MEETING.

Schw-rtz and others at the rear of the room, voting.

FR-DDY L- B-R-N: "If the gentlemen against the blackboard will kindly remove their gloves, it will be much easier to count."

### JUST A FEW.

SHR--D-R, '98: "How is it, Mr. W-nd-ll, that we see double?"

MR. W-ND-LL: "There are several things which-er-stimulate vision."

Professor W- -D (in Calculus): "A slight change will make 3(am)=d(am)3."



### NATURAL PHILOSOPHY.

"The efficiency of a couple is measured by the product of the forces and the length of arm." (See Art. 55, Physics notes.)

### HORRIBLE DEATH!

INNOCENT 1900 (October 1st): "Oh! Mrs. Bird, how much do you charge for checking?" (Funeral at 3.30.)

PROFESSOR V-G-L (explaining): "In Romance languages the moon is spoken of as being feminine, because she is out all night." (Howls and cheers.)

PROFESSOR CL-FF-RD: "These experiments explain the fact that the hand may be dipped into melted iron, and that red-hot plates may be handled without injury, as I will show at another lecture."

### SNAP COURSE.

D-CK M-MM-RS (8.30 A. M. in Chemical lab., to Ch-p-n, who has just come in): "Well! Ch-p-, I've beat you down this morning."

CH-P-N: "Oh! don't flatter yourself; I've just been out fifteen minutes for breakfast."



### 1 COR. II. 14.

"Doth not even nature itself teach you, that, if a man have long hair, it is a shame unto him?"

### WANTED: A GLASS CASE.

'98 MAN (in Phys. Lab. to McJ-nk-n, '98): "How in h-ll does this d--- thing work?"

McJ-nk-n, '98: " My dear friend, I am unaccustomed to such vile language, and do not approve of it; I shall work at the other table in future."

### TWO ARRESTED.

### Students Make Riot at Boston Theatre.

Two students were given a ride in the patrol wagon Saturday night.

A crowd of ninety-skiple-longing to dea of the pressinent educational establishments, uncorked their enthusiasm at a great rate. The gang had been enjoying a dinner at one of the downtown hotels, and all were feeling hilarious. Down Washington street they went shouting and yelling to best the bank. Discordant patrol washington and stable and similar discurbances niles the air.

When they reached the Boston Theatre the throng was coming out and their ac-

When they reached the Boston Theatre the throng was coming out and their actions became almost disgraceful. They josted women and men from right to set. If a person attempted to extallate a crowd would surround him and pash him ail over the sidewalk.

Officer Loughlin of Division 4 was on duty at the time. He remonstrated with the boys, but with no avail. The remarks

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CHAPPIE GETS ARRESTED.

CHAPPIE GETS ARRESTED.

of the officer seemed to add fuel to the flames, for they redopbled their efforts to create a disturbance.

By this time matters were getting hot. The minety-six were having a great time. On the sidewake several of the men josticel were trying to get in a few whacks at their tormentors.

Officer Loughlin decided that while everybody was having fon he might as well have some. Picking out a complet of which have some. Picking out a complete of the control of t

### "SOPES" CAPTURED THE MEETING.

Institute of Technology Freshman Class
Elected Officers Under Difficulties:
The walls of cid Huntington Hall resounded resterday afternoon to one of sounded resisteday afternoon to use of the most exciting meetings of the fresh-man class that was ever held at the lastitute of Technology. About 80 sopho-mores effected an entrance into the hall by way of the fire escapes and faculty entrances and "joilled" the 200 "fresh-ies" who were present, until they wished they were back in the high schools, whence they came.

ies" who were present, until they wished they were back in the high schools, whence they came.

The old cask doors of the hall have withsteed some pretty wild rushes, and mover before in their history was one of the four completely tern from its hinges, as in the acrimmany yesterday, when the sophomeces from without rushed into the hopomore from without rushed into the doors so that no more '5' mer could the doors so that no more '5' mer could get in, Harry W. Allen, president of the junior class, called the meeting to the property charge of the property of the proper

### IT WAS DRY.

No Wine at the Class Dinner of the Tech-

No Wine at the Class Dinner of the Technology, the Class of "\$\mathbb{G}\$ Institute of Technology, had their first class dinner last evening at Young's, about \$\mathbb{G}\$ being present. If was a total abclittopic dinner. Mr. W. W. Ward was tooatmaster, and the toward was tooatmaster, and the toward was tooatmaster, and the toward was followed, Address, W. M. Hall, "Technology," G. R. Wadsworth; "Cupid's dart," J. G. Lisper, Jr.; "\$\mathre{g}\$ vs. \$\mathre{g}\$. Signature, "Cupid's art," J. G. Lisper, Jr.; "\$\mathre{g}\$ vs. \$\mathre{g}\$. Signature, "Lorentz Sig

### VERY NAUGHTY SOPHS.

They Take Advantage of the Green Technology Preshies

"Pea Green" for Class President-Faunce. Fogarty and "The Bird" for Committee.

The class of '98 is happy today, for the largest freshman class on record has beenfound to be very easily taken in.

At the freshies first meeting, which was held yesterday, the sophs partly filled the hall and elected one of their number, W M. Hall, chairman pro tem.

The election of officers was then called

The election of officers was then called for, and J. G. Letper of '8' was elected "regent" of the freehman class, L. D. Gardiner, also a soph, was elected "vice-regent" on a unanimous vote. The freehment began to "smell a rat" at this time, but only a few made any active demonstration, and this was easily quelled by the sophs. A "fake" commission of Uncle Linus Faunce. Mr. Pogarty and "the Bird," all well-known Technology institutions, was elected amid great excitement.

ment.
At leaf, however, when the sophs proposed "Pea Greent" for president of '90, even the dullest freshman saw what was up, and made a rush to clear the hall of the sophmores. The latter were doe many for them, however, and soon had all the freshmen bodged in the hall, while the yells of '85 phounded outside.

This is the third clash of the claster, and so far has certainly had the best of '81.

Boston,

President, J. D. UNDERWOOD Malden. Ist Vice Pres., GRANVILLE SMITH, Washington. 2d Vice Pres., R. W. BABSON. Gloucester. Secretary, J. G. LIEPER. Philadelphia. Treasurer, R. S. TOBEY.

To all members of Class of '98 from West, South, East and North, outside of Boston. This ticket is opposition to English High Clique of Boston, who always attempt to run the class.

#### LATENT MECHANICAL ENERGY.

 $\int \int_{0}^{\infty} \text{ond}(\text{ericker}).$ 

S. L. H-w-RD, '97 (translating): "She met him at the—er—what is Schlossplatz?

Professor V-g-L: "Castle Square."

TH-RL-W W-SHB-RN: "Dr. Dewey is pretty hot dog, isn't he?" W-LFR-D B-NCR-FT: "Yes; Ph.D."



#### AN EDITOR.

This man with the look as of pain,
Is writing an Ed. for The Tech.
He is striving with might and with main,—
Though it seems to be causing him pain;
I imagine he's twisted, a grain,
Like the rest of those writers, who reck
Not a whit of expressing their pain
By writing those Eds. in The Tech.

#### UNRESTRAINABLE, "GETTY."

Professor L-Nz- (to class which was stamping at one of his periodic effusions): "Gentlemen, gentlemen, please do not do that any more than you can possibly help."

#### OBLIGING.

Professor S-nd-r-ck-r (after Anth-ny, '98, had finished a demonstration): "That is not quite clear yet."

ANTH-NY: "What part is it, Professor, which you do not understand?"

Freshman Co-ed (gazing at log. tables): "Do we have to memorize these things, Professor W-lls?"

#### CERMAN AT M I T

	GERMAN AT M. I.	
studenten, laten, yawnen, sleepen, seven, dressen, sudden,	stude, long, wink, sound, wake, wash, exam.,	gehardet. gedullet. gobedden. gedreamen. getuppen. gequicken. geflunken.
damen.	damit.	bedammen.



ON LYING.

HE lies I have told you are many, I own,
But without them I'd never progress.
In fact, the results for the fault quite atone;
You agree with me? Come, now, confess.

When I said that your eyes were like shining twin stars, And your cheeks like the faint flushing rose, Though the words are a libel, untrue as they are, They are better than truth, I suppose?

When I called you possessed of a fairy-like grace, Said your heart, as an angel's, was pure; That you knew what was what I could tell by your face, And you weighed seven stone I am sure;

When I told you I'd never loved any but you,
And that constant I'd always remain,—
You believed just as much as your heart told you to,
(The advantage of lying again).

Yes, lying and loving together bring bliss, And all lovers will boycott the truth; And lying they'll love, and deceiving they'll kiss, As long as there's maiden and youth.

#### TRANSACTIONS OF T. T. T.



UR Sophomores and Seniors grave, On manual training bent, To Master M-rr-ck's turning shop For recreation went.

The lathes do buzz, the chips do fly,—
A busy scene is there;
The muttered execration low
And sawdust fill the air.

The greatest low comedian
In all the Senior class,
To tell a joke a long breath drew;
And then,—alack! alas!

His mouth he ope'd; the air rushed in To fill the yawning chasm; Some dust his mucous membrane hit, And caused, thereby, a spasm.

He paused, he winked, his wrinkled brow Portended grave disaster; And then, convulsed, he sneezed a sneeze That nearly cracked the plaster.

The keynote struck, two more bold lads
Do join to swell the sound.

A pause,—then, three in unison,
They shake the very ground.

Then in doth Master M-rr-ck rush, And quick shuts off the power. "Now, boys, make all the noise you can For quarter of an hour."

A cry spontaneous burst forth; Not one man stood aloof: In short, a long Tech yell they gave, Which nearly raised the roof.

<sup>&</sup>lt;sup>1</sup>The Technology Turnverein.

Again doth Master M-rr-ck rush; With rage he seems to hop: "My orders stern must be obeyed, And you may leave the shop."

From early youth it has been taught To do as one is told; But, in this year of grace, that rule's Grown obsolete and old.



#### Фесниосоду' Вамбои.



With regal step and haughty mien We daily see him walk; But few are those he stops to greet, With few he deigns to talk.

His flowing (?) locks hang down his back; Perhaps they give him strength, For never does he have them cut; Each day adds to their length.

Let him beware of Co-eds fair, Lest a Delilah should appear, Who may ensnare, and clip that hair, Which is to him so dear.



#### Я Рковьем и Махима анд Минма.



N "variety's the spice of life,"
Yet "rolling stones gather no moss."
How can one get the best of each,
With the least of possible loss?

A Prof. there is at M. I. T.,
With keen and subtle mind,
Who has solved, I think, this problem hard,
And proverbs twain combined.

Just see H. Tyl-r every day
For, say, a week or two,
You'll be surprised at the change bizarre
You see his face go through.

He shaves as clean as monk at first, And tries it for a while; Then grows a beard, and trims it off In every conceivable style.

Variety he surely has, And for moss, you'll all agree, What grows on the chin of H-rry T. Is fine as you'd wish to see.



Two THINGS EQUAL TO THE SAME THING.



In the Spring a young man's fancy
Lightly turns to love, they say;
So it was with Lym-n H-pg--d,
Toward the close of term, last May.

Thoughts anent a certain fair one Filled with restlessness his mind, And some present, fit to take her, Eagerly he sought to find.

Gilded belts for girls, that season, Were considered quite the thing. I'll get one of those," said H-pg- - d; "Later on, perhaps, a ring."

So he sought the marts of Fashion, When he learned, to his surprise, That the belt would not fit snugly If he didn't know the size.

Then he blushed and stammered slightly, Losing all his wonted calm, But in halting tones suggested, "Could you measure—er—my arm?"





#### RECOLLECTIONS OF AN ARCHITECT.

How dear to my heart are the scenes of the chem. lab.,
When fond recollection presents them to view,—
The test tubes, the bottles, the crude apparatus,
And all the strange things that my Freshman year knew;
The wide-spreading stairs that I climbed up so often,
My lab. coat, in which I am sure I looked swell,
The B.U.tiful maidens who shared in my labors,
And e'en the bad odors which therein did dwell.

The horrible odors, The far-reaching odors, The long-lasting odors, Which therein did dwell!

That ill-smelling chem. lab. I hailed with great pleasure (nit),
As I rushed up the stairs so as not to be late;
I found it a source of an exquisite rapture,
The pleasure of which no mere words can relate.



I ardently struggled with clothes-bags and coat-hooks, As into my lab. coat I tumbled pell-mell, Then rushed to my locker and broke many test tubes, And thought that I'd rather by far be in h-ll.

> Those horrible odors, Those far-reaching odors, Those long-lasting odors, Suggestive of h-ll!

At last, when my work was once finally started,
And something was boiling just quite as it should,
I'd hear the sweet voice of the pleasant instructor
Say, "Please, Mr. X., put that under the hood."
But now, far removed from that loved situation
I sigh with regret, and weep salt tears as well,
When I go into Physics or elsewhere in Walker,
And catch a stray whiff of those odors so fell.

Those horrible odors, Those far-reaching odors, Those long-lasting odors, Which nothing can quell!





No object more precious is under the sun
Than pretty girls, dimpling with mirth;
And though you may poke at their intellects fun,
They're surely creations of Worth.





#### "A college joke to cure the dumps."

"The kindest man, the best conditioned and unwearied spirit in doing courtesies."

Professor v-n D--ll.

"When I was at home I was in a better place." - Our view of Tech.

" All the learned and authentic fellows."-The Faculty.

"But in the way of bargain, mark ye me,
I'll cavil on the ninth part of a hair."—R-dl-r.

"He was a man of an unbounded stomach."-T-rr-y, '98.

"The damned use that word in hell."- Applied.

"And of his port as meke as is a mayde."-Mr. C. L. Ad-ms.

"She is neither fish, nor flesh, nor good red herring."- The Co-ed.

"This is the third time; I hope good luck lies in odd numbers."

—S. L. H-w-rd, '97, Summer School in Physics.

"Perhaps it may turn out a song, Perhaps turn out a sermon."—Professor B-t-s's Lecture.

"Cheaply bought for thrice their weight in gold."-Drawing Instruments.

"And thou art long, and lank, and brown, As is the ribbed sea sand."—W. Br-wst-r, '98.

- "Beholding heaven, and feeling hell."-The Senior.
- "There was a sound of revelry by night."-A Meeting of the Corporation.
- "The little foolery that wise men have makes a great show."-Professor N.l-s.
  - "And both were young, and one was beautiful."-The '98 Biologists.
    - "He used to wear a long black coat
      All buttoned down before."—Secretary Tyl-r.
- "He is great who is what he is from nature, and who never reminds us of others."

  -E. P. M-s-n, '07.
  - "A banner with a strange device."-At the '99-00 Game.
  - "Although I am a pious man, I am not the less a man." G. I. F-sk-, '97.
  - "It is a condition which confronts us-not a theory."-The Unfortunates.
  - "Venerable men, you have come down to us from a former generation!"

    -'99 to R-m-ry and T-w Ex., \*98.
    - "So wise, so young, they say, do never live long."-G. T. C-ttl-, 'o8.
      - "I am very fond of the company of ladies."-E. R. Sh--k, '99.
        - "Alas! regardless of their doom,
          The little victims play;
          No sense have they of ills to come,
          No care beyond to-day."—Class of 'oo.
        - "Pride in their port, defiance in their eye,

          I see the lords of humankind pass by."—Class of '99.

          (Above two quotations sent in by H. M. K-y-s, '99.)
      - "The wisdom of our ancestors." Technique, '97, '96, '95, etc.
      - "Who mixed reason with pleasure, and wisdom with mirth;

        If he had any faults, he has left us in doubt!"—Professor S-dgw-ck.

- "For that fine madness still he did retain
  Which rightly should possess a poet's brain,"—Professor B-t-s.
- "A poor thing, but mine own."- W-lls' Geometry.
- "Black as night, fierce as ten furies, terrible as hell."-L-n-s F--nc-.
  - "Born but to banquet and to drain the bowl."-P. Cl-ff-rd, '98.
- 44 A man who could make such a pun would not scruple to pick a pocket."

  -Mr. Bl-chst--n.
  - "Their rising all at once was as the sound Of thunder heard remote."—Pol. Econ.
  - "You may relish him more in the soldier than in the scholar."-The Freshman.
    - "That oiled and curled Assyrian Bull."-Prof. D-spr-d-ll-.
  - "A damned cramp piece of penmanship as ever I saw in my life."-Mr. P--rs-n's.
- "Let there be gall enough in thy ink; though thou write with a goose-pen, no matter."

  —Technique Motto.
  - "Exceeding fair she was not."-B. U. Co-ed.
    - "I am slow of study."- W-rc-st-r, '97.
  - "A very ancient and fishlike smell."-13 Rogers.
  - "What are these
    So withered, and so wild in their attire,
    That look not like the inhabitants o' the earth,
    And yet are on't?"—After the rush.
  - "Upon the platform, 'twixt eleven and twelve, I'll visit you."—Captain B-g-l-w.
  - "Though it make the unskillful laugh, cannot but make the judicious grieve."

     The Wave Motion joke.
    - "It will discourse most eloquent music."-H. G. J-hns-n, '99.

- "What imports the nomination of this gentleman?"-G. A. H-tch-ns-n, '98.
  - "Take physic (s) pomp;
    Expose thyself to feel what wretches feel,"—To Specials.
    - "Alas, he is too young."—P-ch-n. ('93 Technique.)
      "Time cures all things."
    - "When the brisk minor pants for twenty-one."

      —(See liquor laws as regards minors.)

He's out of the ordinary run of men."-Gr-sv-n-r, '98.

- "It must be done like lightning."-Mech. Eng. Draw.
- "The best laid plans o' mice and men gang oft agley."

  -J. D. Und-rw--d's Freshman Ticket.
- "The first in banquet, but the last in fight."-Class of '97.
- "Every man for himself, his own ends, the Devil for all."-Tech. Spirit.
  - "He was not of an age, but for all time."-F. W. D-l-b-r.
  - "Oh dark, dark, dark, amid the blaze of noon."-22 Walker.
    - "Sweet bird that shun'st the noise of folly, Most musical, most melancholy.—Herself.

His cogitative faculties immersed In cogibundity of cogitation."—The Lounger.

- "I believe they talked of me, for they laughed consumedly."-G. H. Wr-ght, '98.
  - "The bell strikes one. We take no note of time But from its loss."—Physics.
  - "And unextinguished laughter shakes the skies."-English Lit.
    - "This, this is misery—the last, the worst That man can feel!"—Heat.
- "A Frenchman must be always talking, whether he knows anything of the matter or not."—C. etc. B-rn-rd.

- "Doing good, disinterested good, is not our trade."-Mac's Co-op.
  - "His cheek is like a red, red rose."-G. H. McC-rthy, '97.
- "Eye of newt and toe of frog, wool of bat and tongue of dog."-Menu of Architectural

  Society's Dinner in Chinatown.
  - "'Tis as easy as lying."-Cutting Drill.
  - "I have immortal longings in me."-H. L. M-rs-, '99.
  - "Two friends, two bodies, with one soul inspired."-R-ss and Tw-mbly, '98.
    - "All learned (?), and all drunk."- Vacht Club Dinner.
    - "Vein wisdom all, and Faults philosophy."-Course III.
- "There is something in your manner which would almost imply that you will hear me coldly."—H. W. Tyl-r.
  - "Short of stature he was, but strongly built and athletic;

    Broad in the shoulders, deep chested, with muscles and sinews of iron."

    —A. W. Gr-sv-n-r, '98.
  - "A region of repose it seems, a place of slumber and of dreams."- Technology.
    - "Clean shaven was he as a priest."-Professor All-n.
    - "His eyes seemed gazing far away."-Professor P-p-.
    - "I am content, but you must let no man know it."-L. All-nd, '98.
- "Well, let these remain because I need them; and these others, also, because they need me."—Professor P--b-dy (as he flunks three fourths of his section in Thermo.)
- "Nay, though I ask you a question, yet I did not mean you should answer me. I mean to answer myself."—Professor R-pl-y.
  - "No matter, it was long ago;
    And that is all we need to know."—The advent of P-ch-n.

"Led by illusions romantic, and subtle deceptions of fancy."-Str-ckl-nd the Silverite.

"The post of honor is a private station."-B. H-rd, '97.

"About as broad as it is long."-C. S. Br-dl- -, '97.

I could a tale unfold whose lightest word would harrow up thy soul.—Hammer and Tongs Dinner, March 8, 1897.

"All is not Gospel that thou doest speake."- C. L-mb, '97.

"Hear ye not the hum of mighty workings?"-In the Shops.

"I had a hat."-Before the rush, Election night.

" A good thing."-J. A. P-tch, '99.

"We could not abandon them for our safety, nor keep them for our profit."

—Lectures on Heat.

"Noted for their great philosophical research."—W. F. St-ff-ns, '98, alias Regnault; F. A. Sp--ld-ng, '98, alias Faraday.

"Ah! why should life all labor be?"-N. P. R -- d, '99.

"Happy am I, from care I'm free:
Why aren't they all contented like me?"—Course IX. man.



### STATISTICS.

#### \*

## INSTRUCTING STAFF FOR THE YEAR 1896-1897.

	Professors.	Associate Professors,	Assistant Professors,	Instructors.	Assistants.	Total.	Lectures.	Total.
Architecture	2	1	1	1	0	5	6	11
BIOLOGY, ZOOLOGY, ETC	1	0	.1	3	1	6	3	9
CHEMISTRY	1	2	3	14	5	25	4	29
CIVIL ENGINEERING	4	0	1	2	4	11	1	12
DRAWING AND DESCRIPTIVE GEOMETRY	0	1	0	4	2	7	0	7
ENGLISH, HISTORY, AND POLITICAL SCIENCE	2	1	1	3	0	7	2	9
LANGUAGE	1	1	2	4	0	8	0	. 8
MATHEMATICS	4	0	3	3	o	10	0	10
MECHANIC ARTS	0	0	0	3	3	6	0	6
MECHANICAL ENGINEERING AND APPLIED MECHANICS	2	0	4	8	4	18	0	18
MILITARY TACTICS	I	0	0	0	0	1	0	1
Mineralogy, Geology, and Geography	1	0	2	0	1	4	0	4
MINING ENGINEERING AND METALLURGY	1	1	1	0	0	3	1	4
NAVAL ARCHITECTURE	1	0	0	1	1	3	0	3
Physics and Electrical Engineering	2	0	2	7	3	14	9	23
Total	23	7	21	53	24	128	26	154

#### DISTRIBUTION OF STUDENTS.

#### UNITED STATES.

Alabama											I	Montana						4
Arkansas											I	Nebraska						
California												New Hampshire					-	26
Colorado			*	4							7	New Jersey .						13
Connectic	ut			*							23	New York						64
Delaware											5	North Carolina						1
District of	C	olu	mb	ia							16	Ohio						29
Georgia												Oregon			-		100	3
Idaho .											1	Pennsylvania						46
Illinois .											45	Rhode Island .						19
Indiana .									×	2	3	South Carolina						
Iowa											12	Tennessee						
Kansas .											3	Texas	1					2
Kentucky												Utah						
Maine .												Vermont				53		8
Maryland												Virginia						
Massachu												Washington .						5
Michigan											- 10	West Virginia						
Minnesota												Wisconsin						
Missouri												Wyoming						1
	To	otal	nı	ım	ber	of	St	ate	s r	epi	esen	ted				ю		

Total number of students from same

#### DISTRIBUTION OF STUDENTS.

#### FOREIGN COUNTRIES.

			1			4.				1	Mexico			+			+	3
											New Brunswick							2
an	3									1	Nova Scotia .		2					1
											Quebec			*	80	w.	179	2
									-	2	Turkey							2
	an:	ana	ana .	ana	 			 			ana Nova Scotia							

Total number of foreign countries repr	eset	nte	d			12
Total number of students from same						20

United States .									
Foreign countries		4			4				20
Total .	310							٠,	1,200

#### SUMMARY OF GRADUATES BY GOURSES. 1868-1896.

Year.	Course I.	II.	III.	IV.	v.	VI.	VII.	VIII.	IX.	X.	XI.	XII.	XIII.	Total.
1868	6	1	6	0	0	0	0	0	1	0	0	0	0	14
1869	2	2	0	0	1	0	0	0	0	0	0	0	0	5
1870	4	2	2	. 0	1	0	0	0	1	0	0	0	0	10
1871	8	2	5	0	2	0	0	0	0	0	0	0	0	17
1872	3	1	5	0	3	0	0	0	0	0	0	0	0	12
1873	12	2	3	1	7	0	0	0	1	0	0	0	0	26
1874	10	4	1	1	0	0	0	0	2	0	0	0	0	18
1875	10	5	6	1	1	0	I	1	2	0	0	0	0	27
1876	12	9	7	0	5	0	2	3	4	0	0	0	0	43*
1877	12	6	8	4	2	0	0	0	0	0	0	0	0	32
1878	8	2	2	3	3	0	0	0	1	0	0	0	0	19
1879	6	8	3	1	3	0	I	1	0	0	0	0	0	23
1880	3	0	3	0	1	0	0	0	1	0	0	0	0	8
1881	3	5	6	3	8	0	1	0	2	0	0	0	0	28
1882	2	5	5	3	6	0	1	1	1	0	0	0	0	24
1883	3	7	5	1	3	0	0	0	0	0	0	0	0	19
1884	5	6	13	0	12	0	0	0	0	0	0	0	0	36
1885	4	6	- 8	2	4	2	0	0	1	0	0	0	0	27
1886	9	23	7	. 1	7	10	1	0	1	0	0	0	0	59
1887	10	17	8	1	9	8	1	I	3	0	0	0	0	58
1888	11	25	4	5	10	17	3	1	1	0	0	0	0	77
1889	15	23	5	3	8	17	1	1	2	0	0	0	0	75
1890	25	27	3	5	13	18	3	2	6	0	0	0	0	102
1891	17	26	4	6	11	23	3	3	1	7	0	1	0	103
1892	22	26	4	13	7	36	6	1	7	4	6	1	0	133
1893	25	30	5	2	8	41	2	0	6	8	0	2	0	129
1894	21	31	4	13	11	33	1	- 3	5	12	3	0	0	138
1895	25	30	3	15	13	33	0	2	4	11	4	0	5	145
1896	26	34	10	24	15	48	3	3	7	7	4	3	5	189
	-	-	-	-	-	-	_		-	-	-	1		-
Total,	319	366	145	108	174	286	29	23	60	49	17	7	10	1,596

<sup>\*</sup>One graduate of Course of Metallurgy in 1876.

#### SALARIES OF ALUMNI.

The statistics given below were compiled from over five hundred replies, received in answer to circulars sent to all the graduates in each of the twelve classes. In making up the averages, the exact values of salaries above \$3,000 have, as far as possible, been used. Courses from which no answers were received have been omitted from the tables.

#### Class of '81.

Course,	\$500 to	\$1,000 to	\$1,500 to	\$2,000 to	\$2,500 to	Over \$3,000	
	\$1,000	\$1,500	\$2,000	\$2,500	\$3,000	Over \$3,000	Average.
I.	0	1	0	0	0	0.	\$1,250
III.	0	0	0	. 0	0	1	3,600
IV.	0	0	0	0	1	0	2,750
V.	1	I	1	0	0	0	1,250
VII.	1	0	0	0	0	0	750
Total,	2	2	1	0	1	1	1,729
			Class o	f '83			
			Ciaso C				
I.	0	0	1	I	0	0	\$2,000
II.	0	0	0	1	1	ī	3,000
III.	0	0	0	0	1	2	5.917
V.	0	0	0	1	0	0	2,250
Total,	0	0	1	3	2	3	3,667
			Class o	f *85			
			Citation C	. 00.			
I.	0	0	0	1-	0	0	\$2,250
II.	0	0	I	0	0	ī	2,675
III.	0	0	0	0	0	2	5.750
V.	0	0	0 .	I	0	0	2,250
VI.	0	0	0	0	0	1	4,000
Total,	0	0	T.	2	.0	4	3,621
			Class o	f '87.			
I.	1	0	3	I	2	0	\$1,964
II.	0	3	2	4	2	2	2,288
III.	0	1	2	2	2	0	2,107
V.	0	1	2	0	1	1	2,300
VI.	0	1	1	1	2	0	2,150
IX.	0	0	0	0	1	1	3.375
Total,	1	6	10	8	10	4	2,237
							-1-31

#### SALARIES OF ALUMNI. - Continued.

#### Class of '88.

			-	10.575			
Course.	\$500 to \$1,000	\$1,000 to \$1,500	\$1,500 to \$2,000	\$2,000 to \$2,500	\$2,500 to \$3,000	Over \$3,000	Average.
I.	0	0	1	1	1	0	\$2,250
II.	0	4	2	1	0	2	2,194
III.	0	1	1	0	0	0	1,500
IV.	0	0	1	1	1	I	2,938
V.	0	1	1	2	I	0	2,050
VI.	0	1	1	ĭ	0	2	2,770
VII.	0	0	1	0	0	1	2,875
IX.	0	0	0	0	1	0	2,750
Total,	0	7	8	6	4	6	2,382
			Class o	f '89.			
I.	0	2	3	0	0	1	\$3,625
II.	0	4	4	4	2	1	2,033
III.	0	I	0	1	0	0	1,750
IV.	0	0	1	1	0	0	2,000
V.	I	2	1	1	0	0	1,450
VI.	0	3	4	2	0	2	2,114
Total, .	1	12	13	9	2	4	2,201
			Class o	f '90.			
I.	2	5	2	3	3	0	\$1,750
II.	0	6	3	2,	1	2	1,936
III.	0	0	0	0	1	0	2,750
IV.	0	1	0	0	0	0	1,250
V.	1	3	0	0	0	2	2,250
VI.	0	0	3	ı	1	0	2,050
VII.	0	1	0	0	. 0	0	1,250
VIII.	0	0	0	0	1	0	2,750
IX.	0	1	0	0	0	0	1,250
Total,	3	17	8	6	7	4	1,919
			Class o	f '91.			
· I.	1	2	3	1	0	0	\$1,536
II.	1	5	4	0	0	0	1,400
III.	0	0	o o	I	0	0	2,250
IV.	0	3	0	0	0	0	1,250
V.	1	1	3	0	0	0	1,450
VI.	1	4	3	1	0	0	1,472
VII.	1	0	0	0	0	0	750
VIII.	1	0	1	0	0	0	1,250
Х.	0	I	1	1	1	1	2,700
XII.	0	ı	0	0	0	0	1,250
Total.	6	17	15	4	1	1	1,540

#### SALARIES OF ALUMNI. - Continued.

#### Class of '92.

	\$500 to	\$1,000 to	\$1,500 to	\$2,000 to	\$2,500 to		
Course.	\$1,000	\$1,500	\$2,000	\$2,500	\$3,000	Over \$3,000	Average,
I.	3	4	2	0	0	0	\$1,194
II.	3	7	4	0	1	0	1,383
III.	0	1	0	0	0	0	1,250
IV.	2	0	1	0	0	0	1,083
v.	0	0	3	0	1	0	2,000
VI.	2	7	5	0	2	0	1,531
VII.	1	í	0	0	0	0	1,000
IX.	0	2	0	0	0	0	1,250
X.		- 0	1	0	1	0	2,250
	0						
XI.	0	3	1	1	0	0	1,550
Total,	11	25	17	1	5	0	1,445
			Class o	of '93.			
I.	6	9	5	0	0	0	\$1,225
II.		2	3	0	0	0	1,250
III.	3 2	0	0	0	0	0	750
7-5-5-5-5			1997		0	0	
V.	2	1	O	0			917
VI.	11	5	0	1	2	0	1,171
IX.	0	0	1	0	0	0	1,750
х.	0	4	0	0	0	0	1,250
XII,	0	1	0	0	0	0	1,250
Total,	24	22	9	1	2	0	1,190
			Class o	f *94.			
I.		5	2	1	0	0	\$1,250
II.	4 7	4	1	0	0	0	1,000
III.	ó	2	0	0	0	0	1,250
IV.	0	1	1	0	0	0	1,500
V.	3	2	1	0	0	0	1,083
VI.		3	2	0	0	0 1	1,068
IX. X.	0	1 2	0 1	0	0	0	2,666
XI.	3	0	0	0	0	0	750
Total,	24	20	8	2	0	1	1,200
			Class o	1 105			
I.	9	4	0	0	0	0	\$904
II.	11	2	1	0	0	0	893
III.	1 2	0	0	0	0	0	750 917
V.	1	3	0	0	0	0	1,125
VI.	7	3	0	0	0	0	900
VIII.	ó	1	. 0	0	0	0	1,250
IX.	1	0	0	0	0	0	750
Х.	4	0	0	0	0	0	750
XI.	2	1	0	0	0	- 0	917
XIII. Total,	0	16	0	0	0	0	914
Tour!	38	10			-		3.4

# College Statistics.

ALBION		A		1861	Lewis R. Fiske, D.D., LL.D.	450	388	Pink and Green.	Saga.
AMHERST		V .	Amherst, Mass.	1821	Merrill Edwards Gates.	425	320	Purple and White.	The Olio.
ARMOUR INSTITUTE		0	Chicago, III.	1892	F. W. Gunsaulus, D.D.	1126	38	Yellow and Black.	
ATLANTA UNIVERSITY		V .	Atlanta, Ga.	1867	Rev. Horace Burnstead, D.D.	305	23	Cardinal Red and Steel Gray.	
BARNARD		Z.	New York, N.Y.	1880	Emily James Smith, A.B., Dean.	100	375	Blue and White,	Barnard Annal.
5		. B	Boston, Mass.	1860	William Fairfield Warren, L.L.D.	1337	114	Scarlet and White,	The Hub.
Bowdoin		. B	Brunswick, Me.	1704	William De Witt Hyde, D.D.	377	3.3	White.	Bowdoin Bugle.
BROWN UNIVERSITY			Providence, R. I.	1764	Rev. E. B. Andrews, D.D., L.L.D.	806	92	Brown and White.	The Liber.
BRYN MAWR		. B	Bryn Mawr, Pa.	1880	M. Carey Thomas, Ph.D.	200	41	Yellow and White.	The Lantern.
BUCHTEL		A .	Akron, Ohio.	1870	Prof. C. M. Knight, Acting.	200	16	Navy Blue and Old Gold.	The Buchtel.
COLBY UNIVERSITY			Waterville, Me.	1820	Nathaniel Butler, D.D.	225	17	Blue and Gray,	Colby Oracle.
COLGATE UNIVERSITY		H	Hamilton, N. V.	1818	George William Smith, A.B., LL.B, LL.D.	. 165	23	Yellow and Maroon.	Salmagundi.
COLLEGE OF WILLIAM AND MARY	NY.	N .	Williamsburg, Va.	1693	Lyon G. Tyler.	142	6	Orange and White.	
COLORADO COLLEGE		. 0	Colorado Springs, Colo.	1874	William F. Slocum, Jr., LL.D.	300	333	Orange and Black.	
COLUMBIA UNIVERSITY .			New York, N. Y.	1754	Seth Low.	1858	289	Light Blue and White.	The Columbian.
CORNELL UNIVERSITY		. It	Ithaca, N. Y.	1865	Jacob Gould Schurman, D.Sc., LL.D.	1763	171	Carnelian and White.	The Cornellian.
DARTMOUTH		. H	Hanover, N. H.	1769	William Jewett Tucker,	620	48	Green and White.	Aegis.
DR PAUW UNIVERSITY		. 6	Greencastle, Ind.	1837	Rev. Hillary A. Gobin, D.D.	200	35	Gold.	Mirage.
DICKINSON			Carlisle, Pa.	1783	George Edward Reed.	380	24	Red and White.	Microcosm.
<b>D</b> вуку		S.	Springfield, Mo.	1873	Homer T. Fuller.	250	15	Scarlet and Gray,	Drury Mirror.
FISK UNIVERSITY		Z	Nashville, Tenn.	1866	Rev. Erastus Milo Cravath, D.D.	449	3.1	Blue and Old Gold,	
FRANKLIN AND MARSHALL .		. I	Lancaster, Pa.	1852	John S. Stahr, Ph.D., D.D.	891	13	White and Blue.	Oriflamme.
GIRARD	1		Philadelphia, Pa.	1832	A. N. Felterolf, Ph.D., LL.D.	1524	65	Steel and Garnet.	
HAMILTON			Clinton, N. Y.	1812	M. W. Stryker,	145	18	Blue and Buff.	Hamiltonian.
HARVARD UNIVERSITY		. 0	Cambridge, Mass.	1636	Charles William Eliot, LL.D.	3674	304	Crimson.	
HOBART		. 6	Geneva, N. Y.	1825	Prof. Wm. P. Durfee, Ph.D., Dean.	825	18	Orange and Royal Purple.	
lowa		9 .	Grinnell, Iowa.	1847	George A. Gates.	525	30	Scarlet and Black.	The Cyclone.
JOHNS HOPKINS UNIVERSITY		. B	Baltimore, Md.	1876	Daniel C. Gilman.	514	110	Black and Old Gold.	The Hullaballoo.
KRNTUCKY UNIVERSITY .		T.	Lexington, Ky.	1836	Charles Louis Loos,	756	34	Orange and Blue.	
LAPAYETTE		H .	Easton, Pa.	1836	Ethelbert D. Warfield, LL.D.	314	38	Maroon and White.	The Melange.
LEHIGH UNIVERSITY		95	South Bethlehem, Pa.	1866	Thomas Messinger Drown, L.L.D.	365	40	Brown and White.	Epitome.
LELAND STANFORD, JR., UNIVERS	CRSIT	Tr, S	Stanford University, Cal.	1801	David Starr Jordan.	1085	8	Cardinal.	Stanford 2nad.
MAINE STATE COLLEGE .			Orono, Me.	1865	A. W. Harris, Sc.D.	316	34	Light Blue.	The Prism.
MARIETTA			Marietta, Ohio.	1835	J. H. Chamberlin, Dean.	243	30	Blue and White.	Mariettana.
MASS, INSTITUTE OF TECHNOLOGY	ADC	. E	Boston, Mass.	1865	*Francis A. Walker, LL.D.	1200	130	Cardinal Red and Silver Gray.	Technique.
MIDDLEBURY	,		Middlebury, Vt.	1500	Ezra Brainerd, D.D., I.L.D.	1111	10	Blue and White,	Kaleidoscope.
MT. HOLYOKE		. 30	South Hadley, Mass.	1837	Elizabeth Storrs Mead, A.M.	335	37	Blue.	Llamarada.
MUHLENBERG			Allentown, Pa.	1867	Theodore L. Seip, D.D.	100	13	Cardinal and Steel.	The Muhlenberg.
NEW YORK UNIVERSITY .		4	New York, N. Y.	1831	Henry M. MacCraken, D.D., LL.D.	1313	155	Violet.	The Violet.
NIAGARA UNIVERSITY		4	Niagara Falls, N. Y.	1856	Rev. P. MacHale, C.M.	200	250	Purple and White.	Niagara Index.
NORTHWESTERN UNIVERSITY		图	Evanston, III.	1851	Henry Wade Rogers.	2377	223	Royal Purple.	The Syllabus.
OHERLIN		0	Oberlin, Ohio,	1811	James H. Fairchild.	1444	86	Crimson and Gold	HE O HE
				The same		4491.1	20	Crimison and Crown	4111-0-111

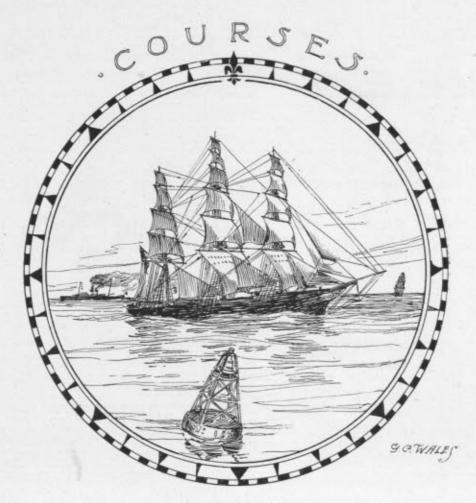
## COLLEGE STATISTICS.—Continued.

Name.	Location.	Founded	President.	Stud'ts. Inst'rs	ast'rs.	Colors.	Annual.
OHIO WESLEYAN UNIVERSITY	Delaware, Ohio,	1844	Rev. J. W. Bashford, D.D.	1271	86	Black and Red.	Catalogue.
PACIFIC UNIVERSITY	Forest Grove, Ore.	1848	Rev. Thomas McClelland, D.D.	195	77	Crimson and Black.	Heart of Oak.
PENNSYLVANIA	Gettysburg, Pa.	1833	Henry W. McKnight, D.D., LL.D.	241	91	Orange and Blue,	The Spectrum.
POLYTECHNIC INSTITUTE OF BR'KLYN,	Brooklyn, N. Y.	1855	David H. Cochran, L.L. D.	723	48	Blue and Gray.	
PRAIT INSTITUTE	Brooklyn, N. Y.	1887	Charles M. Pratt.	3000	150	Cadmium Yellow.	
PRINCETON UNIVERSITY	Princeton, N. J.	1746	Francis Landey Patton, D.D., LL.D.	1501	8	Orange and Black.	Brica-Brac.
PERDUE UNIVERSITY	Lafayette, Ind.	1874	James Henry Smart.	989	59	Black and Old Gold.	The Exponent.
RADCLIPFE	Cambridge, Mass.	1878	Elizabeth C, Agassiz.	357	96		
RENSSELAER POLYTECHNIC INSTITUTE,	Troy, N. Y.	1824	John Hudson Peck.	137	91	Cherry.	Transit.
ROSE POLYTECHNIC INSTITUTE	Terre Haute, Ind.	1883	C. Leo Mees.	125	21	Rose and White.	Rose Technic.
RUTGERS	New Brunswick, N. J.	1766	Austin Scott, Ph.D., LL D.	168	22	Scarlet,	The Scarlet Letter.
	Northampton, Mass.	1872	L. Clark Seelye, D.D., L.L.D.	032	46	White.	
SWARTHMORE	Swarthmore, Pa.	1804	Charles De Garmo,	172	21	Garnet,	Halcyon.
SYRACUSE UNIVERSITY	Syracuse, N. Y.	1870	Rev. James R. Day, D.D., LL.D.	1140	201	Orange.	The Onondagon.
TRINITY	Hartford, Conn.	1823	George Williamson Smith.	131	15	Blue and Gold.	The Ivy.
Turts	Tufts College, Mass.	1852	Elmer Hewitt Capen.	472	85	Brown and Blue.	Brown and Blue.
TULANE UNIVERSITY	New Orleans, La.	1834	William Preston Johnston,	953	7.3	Olive and Blue.	Jambalaya.
UNION	Schenectady, N. Y.	1795	Andrew W. Raymond, D.D., LL.D.	250	25	Garnet.	The Garnet.
U. S. MILITARY ACADEMY	West Point, N. Y.	1802	O. H. Ernst, Lt. Col. U. S. A., Supt.	262	300	Black and Gray.	
U. S. NAVAL ACADEMY	Annapolis, Md.	1845	Philip H. Cooper, Capt. U.S. N.	254	98	Old Gold and Navy Blue.	
UNIVERSITY OF CALIFORNIA	Berkeley, Cal.	1868	Martin Kellogg, A.M., LL.D.	2250	225	Blue and Gold,	Blue and Gold.
UNIVERSITY OF CHICAGO	Chicago, III,	1890	William Rainey Harper, Ph.D., D.D., LL.	LL.D. 1881	175	Maroon,	Cap and Gown.
UNIVERSITY OF COLORADO	Boulder, Colo.	1877	James H. Baker, LL.D.	009	20	Silver and Gold.	Columbine.
UNIVERSITY OF DENVER	Denver, Colo.	1804	Wm. F. McDowell.	541	93	Red and Gold.	Mound Olympus.
University of Illinois	Urbana, III.	1867	Andrew S. Draper, LL.D.	1080	114	Navy Blue and Orange.	Illio.
University of Michigan	Ann Arbor, Mich.	1837	James B. Angell.	3000	104	Maize and Blue.	Micheganensian.
UNIVERSITY OF MINNESOTA	Minneapolis, Minn.	1868	Cyrus Northrop.	2575	180	Maroon and Old Gold.	The Gopher.
UNIVERSITY OF MISSISSIPPI	University, Miss.	1848	Robert B. Fulton.	285	16	Royal Purple.	
UNIVERSITY OF NEBRASKA	Lincoln, Neb.	1869	George Edwin MacLean, LL.D.	1506	IOI	Scarlet and Cream,	The Sombrero.
University of Pennsylvania	Philadelphia, Pa.	1740	Charles C. Harrison, LL.D.	2811	243	Red and Blue.	8
UNIVERSITY OF THE SOUTH	Sewance, Tenn.	1857	B. Lawton Wiggins.	988	20	Royal Purple and Old Gold.	. Cap and Gown.
UNIVERSITY OF TEXAS	Austin, Texas.	1883	George T, Winston,	450	38	Old Gold and White.	The Cactus.
University of Virginia	Charlottesville, Va.	1825	P. B. Banniger, M.D.	490	46	Orange and Blue.	Corks and Curls,
UNIVERSITY OF WISCONSIN	Madison, Wis.	1848	Charles Kendall Adams.	1598	011	Cardinal.	Badger.
VASSAR	Poughkeepsie, N. Y.	1861	James M. Taylor, D.D., LL.D.	537	909	Rose and Gray.	Vassarion.
WASHINGTON AND LEE UNIVERSITY .	Lexington, Va.	1749	Gen. G. W. Custis Lee, LL.D.	223	17	White and Blue,	The Colyx.
WASHINGTON UNIVERSITY	St. Louis, Mo.	1853	W. S. Chaplin.	156	30	Myrtle and Maroon.	
WELLESLEY	Wellesley, Mass.	1875	Julia J. Irvine.	721	11	Blue,	Calender.
Wesleyan University	Middletown, Conn.	1831	Rev. Bradford P. Raymond, D.D., LL.D.		33	Red and Black.	Olla Podrida.
WESTERN MARYLAND	Westminster, Md.	1869	Thomas Hamilton Lewis.	392	15	Old Gold and Olive Green.	Chich-a-go-Runk,
WILLIAMS	Williamstown, Mass.	1793	Franklin Carter.	385	30	Royal Purple.	Catalogue.
WORCESTER POLYTECHNIC INSTITUTE,	Worcester, Mass.	1865	Thomas Corwin Mendenhall.	220	32	Crimson and Steel Gray.	The Afterwath.
WOOSTER UNIVERSITY	Wooster, Ohio.	1866	Rev. S. F. Scovel.	450	30	Black and Old Gold,	The Index.
YALE UNIVERSITY	New Haven, Conn.	1701	Timothy Dwight.	2495	238	Blue,	Tale Banner.

Tables showing Number of Hours Inside and Outside Preparation of the several Gourses.

COURSE.	DDED AD TEN	FIRST YEAR.		SECON	YEAR.	THIRD	YEAR.	FOURT	H YEAR.	707	TALS.
OUKSE.	PREPAR I N	First Term. Second Term		First Term. Second Term		First Term.	Second Term.	First Term.	Second Term.	TOTALS	
I.	Inside.	330	400	385	300	275	380	1-350 2-380 3-350	1-115 2-315 3-225	2835	5700
	Outside.	390	335	320	375	345	405	1-375 2-375 3-375	1-320 2-320 3-405	2865	
II.	Inside.	330	400	360	415	370	368	{ 1-440 2-440 3-440 ( 1-285	1-285 2-285 3-285	2968	5648
	Outside,	390	335	315	360	350	330	2-285 3-285	1-315 2-315 3-315	2680	
III.	Inside.	330	1-400	1-345 2-330	1-360 2-315	1—395 2—440	1-420 2-405		1-495 } 2-495 }	3230	5700
	Outside.	390	1-335	1-330 2-375	1-345 2-360	1-335 2-310	1—320 2—315	1-225 2-225	1—190 } 2—190 }	2470	31.00
IV.	Inside.	330	415	285	255	395	460	4So	495	3115	5590
	Outside.	390	275	390	335	330	260	270	225	2475	
V.	Inside.	330	1-400 2-385	1-345 2-345	1-270 } 2-330 }	520	430	475	90	2850	5115
	Outside.	390	1-335	1-330 2-330	1-330 } 2-315 }	290	355	170	75	2255	
VI.	Inside.	330	400	. 395	325	305	315	390	220	268o	55So
	Outside.	390	335	315	345	415	435	390	275	2900	
VII.	Inside,	330	385	375	405	390	420	1-390	1-315 }	3010	5425
* 11.	Outside.	390	335	300	280	310	240	1-315	1-245 2-215	2415	
VIII.	Inside.	330	400	360	{ 1-360 2-315	1—330 2—300	1—330 2—300	1—360 2—345	1-205 2-190 3-250	2675	5645
	Outside.	390	.3.3.5	380	{ 1-300 2-330	1-405 2-425	1-300 2-420	1-390 2-405	1-380 2-395 3-335	2970	3-13
IX.	Inside.	330	355	240	255	285	350	270	265	2350	5780
	Outside.	390	365	300	285	475	490	605	520	3430	31-0
x.	Inside.	330	400	360	375	365	375	490	300	2995	5650
	Outside.	390	335	315	345	355	345	330	250	2665	3.30
XI.	Inside.	330	400	375	330	365	460	360	325	2945	5590
	Outside.	390	335	300	330	325	330	330	305	2645	
XII.	Inside.	330	385	450	420	435	465	1-480 { 2-480 }	345	3310	5510
	Outside.	390	305	255	270	270	225	1-240 }	245	2200	
XIII.	Inside.	330	400	360	345	340	330	3So	270	2755	5555
AIII.	Outside.	390	335	315	330	380	390	345	315	2S00	3355

Note.—The first option alone is reckoned in the totals. Of the optional studies, the first of 2 or 3, and the first and second of 4 or 5, are used in compiling the tables.



- I. CIVIL ENGINEERING.
- II. MECHANICAL ENGINEERING.
- III. MINING ENGINEERING.
- IV. ARCHITECTURE.
- V. CHEMISTRY.
- VI. ELECTRICAL ENGINEERING.
- VII. BIOLOGY.
- VIII. PHYSICS.
- IX. GENERAL STUDIES.
- X. CHEMICAL ENGINEERING.
- XI. SANITARY ENGINEERING.
- XII. GEOLOGY.
- XIII. NAVAL ARCHITECTURE.





For residence addresses in suburban parts of Boston the following abbreviations are used:—

A.											Allston.
В.								*	7		Brighton.
C.			8		-	-		,			Charlestown.
											Dorchester.
E. B.			1	1		Į.					East Boston.
J. P.											Jamaica Plain.
											Mattapan.
N.	40	١.			٠,				*:		Neponset.
											South Boston.
R.											Roxbury.
											Roslindale.
W. R		030						19		10	West Roxbury.

## REGISTER OF STUDENTS.

NAME AND PRATERNITY.	COURSE.	CLAS	SS. HOME ADDRESS.
Abbot, Lewis Benjamin	IV.	'99	Danvers, Mass.
ABEEL, DAVID GUSTAVUS	I.	'99	Catskill, N. Y.
Adams, Burton Alden	II.	'98	Essex, Mass.
Adams, George Orlando	V.	'00	North Andover, Mass.
Adams, John Howard	IV.	'99	351 Broadway, Pawtucket, R. I.
Adams, Walter Owen	X.	'99	Annisquam, Mass.
Addicks, Lawrence	VI.	'99	706 Spruce St., Philadelphia, Pa.
Albee, Edward Everett	I.	'99	160 West Concord St., Boston.
ALBEE, HERBERT HARPER	X.	'00	Wollaston, Mass.
ALBIN, HENRY ALLISON	VI.	'00	Concord, N. H.
ALDEN, JOHN TROTT	II.	'97	547 Centre St., Newton, Mass.
ALEXANDER, DONALD NELSON	IV.	'98	33 Falcon St., East Boston, Mass.
ALLAND, LEON	I.	'98	8 Gaston St., Roxbury, Mass.
ALLEN, ELBERT GROVER	II.	'00	East Bridgewater, Mass.
ALLEN, HENRY WALTER, Δ. Ψ	X.	'97	124 Newbury St., Boston, Mass.
ALLEN, JAMES WALTER	VI.	'99	Foster St., Newtonville, Mass.
ALLEN, LUCY MABEL	S.	12	Wennehus Ave., Lynn, Mass.
ALLEN, WILLIAM HENRY, JR	XIII.	'96	293 Commonwealth Ave., Boston.
ALLEN, WILLIAM RUSSELL, JR., Σ. A. E.	V.	'00	Pittsfield, Mass.
ALLYN, ROBERT	II.	'98	4 Front St., New London, Conn.
Ames, Joseph William	II.	'98	7 Gooch St., Melrose, Mass.
Anderson, Charles Louis Bates .	I.	'00	Newburyport, Mass.
Anderson, Robert, Ph.B	VI.	'97	6 The Ortig, Cincinnati, Ohio.
Anderson, Robert Peter	II.	'99	Danbury, Conn.
Andrews, George Frederick, A.M.	S.	'27	E. Manning St., Providence, R. I.
Angus, William Jackson, A. T. A.	I.	'00	3213 Michigan Ave., Chicago, Ill.
Anthony, George R., O. B. E	II.	'98	17 Liberty St., Waltham, Mass.
ARCHIBALD, WARREN MARTIN	I.	'99	8 South St., Medford, Mass.
ARNOLD, LYMAN	VI.	'98	West Springfield, Mass.
Ashley, George Francis	IV.	'00	11 Laurel St., Somerville, Mass.
Ashley, Harrison Everett	X.	'99	947 Acushnet Ave., New Bedford.
ATWOOD, ALFRED JAMES	IV.	'00	Ayer, Mass.
ATWOOD, GEORGE DESLER	X.	'00	North Bennington, Vt.
ATWOOD, THOMAS CLARK	I.	'97	362 Cross St., Malden, Mass.
AYER, HAROLD OSGOOD	V.	'99	Danville, Vt.
Ayers, Frederic Chesley	11.	'00	11 Forest St., Roxbury, Mass.
Ayres, Milan Valentine	VI.	'98	Dudley St., Newton Centre.
BABBITT, ALBERT LYMAN	I.	'99	10 Morton St., Somerville, Mass.
BABCOCK, HENRY KIMBERLY, Θ. Ξ	VI.	'99	Neenah, Wis.

NAME AND PRATERNITY.	COURSE.	CLAS	SS. HOME ADDRESS.
	I.	'00	
			East Milton, Mass.
Basson, Roger Ward	I.	'98	8 Angel St., Gloucester, Mass.
BACON, CHARLES JAMES	VI.	'00	Winthrop, Mass.
BACON, LYMAN EDWARD	I.	'98	State Farm, Bridgewater, Mass.
BADLAM, STEPHEN	III.	'00	15 Columbia St. Dorchester, Mass.
BAILEY, ROBERT WILLIAM	XIII.	'99	12 West 22d St., New York City.
Bailey, Thomas Ward	I.	'96	Kingston, Mass.
BAILEY, THOMAS WENDELL	IV.	'99	49 Gardner St., Allston, Mass.
BAKER, ELLIOTT RENSSELAER	V.	'98	7 Brooks Ave., Greendale, Mass.
BAKER, PHILIP STONE	S.	12000	1882 Was'n St., San Francisco, Cal.
BAKER, WILLIS CLARK	VI.	'00	Graniteville, S. C.
BALCOM, REUBEN WILFRED	I.	'00	Framingham, Mass.
Baldwin, Chas. Fowler, Jr., A. Δ. Φ.	VI.	'97	105 N. Gay St., Mt. Vernon, Ohio.
BALKAM, CLIFFORD MANN	VII.	'99	Randolph, Mass.
BALLANTYNE, BERTHA LENNIE	VII.		Hudson, Mass.
BALLOU, HENRY WELCOME	I.	97	63 Princeton Av., Provid'nce, R. I.
Bancroft, Joseph, θ. Ξ	X.	'97	Wilmington, Del.
Bancroft, Wilfred, $\Delta$ . $\Psi$	II.	'97	3310 Arch St., Philadelphia, Pa.
BARNEY, MORGAN	XIII.	'00	St 4th St., New Bedford, Mass.
BARTLETT, JANE HOWARD	V.	'00	West Bridgewater, Mass.
BARKER, HARRINGTON	11.	'98	283 Huron Ave., No. Cambridge.
BARKHOUSE, EDGAR LOUIS	VI.	'97	1043 2d St., Louisville, Ky.
BARLOW, WILLIAM HARVEY, X. P	V.	'97	Mahanoy City, Pa.
BARNES, WARREN HAMMOND	I.	'97	9 Brinsmead St., Marlboro, Mass.
BARRON, CARLYLE NORRIS	II.	'99	35 Broadway, New York, N. Y.
BARROWS, BERNARD	X.	'97	Reading, Mass.
BARRY, CHARLES GARDNER	I.	'99	98 Hillside Ave., Melrose, Mass.
BARTHOLOMEW, ARTHUR WILLIAM .	S.	150	Newton Centre, Mass.
BARTON, CHARLES AUGUSTUS, JR	VI.	'00	Park Ridge, Ill.
BATCHELLER, JAMES HERVEY	III.	100	34 Monument Sq., Charlestown.
BAUMANN, EDGAR BUTLER	S.		1838 Wellington St., Chicago, Ill.
BEAN, WALTER RAYMOND	XIII.	199	44 Woodbine St., Roxbury.
BECKWITH, EDWARD PIERREPONT, Δ.Ψ.	VI.	'00	Cazenovia, N. Y.
BEEKMAN, JOHN VANDERVEER, JR	S.		216 West 8th St., Plainfield, N. J.
BEERS, HERBERT PAGE, P. B. E	IV.	'97	5464 Jefferson Ave., Chicago, Ill.
BELCHER, HENRY CLIFFORD	II.	'98	Easton, Mass.
BELKNAP, GEORGE HENRY	II.	'00	13 Milton Ave., Mattapan, Mass.
BENDER, LOWRY DRAVO WILKINSON.	III.	'99	238 Main St., Pittsburg, Pa.
BENNETT, RAYMOND FRANKLIN	I.	99	35 Melbourne St., Portland, Me.
BENNINK, CARROL AUGUSTUS	IV.	'98	Ontario, Cal,
BENSON, HOWARD JONATHAN, Ph.B.	III.	'98	Akron, Ohio.
	VI.	'98	23 Tone St., Hartford, Conn.
BERGEN, FRANCIS PATRICK	IV.	'98	Neenah, Wis.
Bergstrom, George Edwin, θ. Ξ.			
BINLEY, WILLIAM, JR	XIII.	97	14 Tremont St., Newburyp't, Mass.
BISHOP, FREDERIC LENDALL	VIII.	'98	Malden, Mass.
BISSELL, THOMAS HALLY, V. Y	VI.	'98	950 Delaware Ave., Buffalo, N. Y.
BIXBY, GEORGE LINDER, S.B	S.	1.0	Foxboro, Mass.
BLACKMER, WILLIAM DANIELS, X. Φ.	III.	'98	63t N. Cascade Ave., Col. Sp'gs.
BLAIR, ROBERT SHERMAN	VI.	'00	Waterville Road, Waterbury, Ct.

NAME AND FRATERNITY.	COURSE.	CLASS	s. HOME ADDRESS.
BLAKE, FRANCIS MINOT, A. T. A	II.	'98	426 Marlboro St., Boston, Mass.
BLAKE, KENNETH MALLON, A. K. E	II.	'99	Newton, Mass.
BLANCHARD, ARTHUR ALPHONSO	VI.	'98	Newton Centre, Mass.
BLEECKER, JOHN STEARNS, Δ. Υ	II.	'98	6 Louisburg Sq., Boston, Mass.
BLISS, EDWIN PACKARD	S.		Newburyport, Mass.
BLOOD, GEORGE WHITEFIELD	IV.	'98	232 High St., Newburyport, Mass.
BLOOD, PERCY E. FORD	I.	'97	Graniteville, Mass.
BLOSSOM, DAVID HENRY, A.B., A. Y.	I.	'98	Granville, N. Y.
BOARDMAN, FRED CLEVELAND	VI.	'98	Natick, Mass.
BODWELL, HOWARD LAWRENCE	II.	'98	West Boxford, Mass.
BOLAND, MARY A	S.		117 W. Newton St., Boston, Mass.
BOLSTER, ROY HALE	II.	'00	to Cobden St., Roxbury, Mass.
BONNS, WALTER WERDENFELD	IV.	'99	538 Jefferson St., Milwaukee, Wis.
BONNYCASTLE, WILLIAM ROBINSON .	VI.	'97	Louisville, Ky.
BOOTH, GEORGE HENRY	II.	'98	26 Garfield Pl., Po'keepsie, N. Y.
BORDEN, RAYMOND DAVIS	XIII.	'00	739 Rock St., Fall River, Mass.
BORLAND, HUGH	I.	'97	25 Church St., St. Johnsbury, Vt.
BOWEN, EDGAR CAMPBELL, JR	II.	'97	698 Dayton Ave., St. Paul, Minn.
BOWEN, RALPH ALBERT	V.	'97	Adams, Mass.
Воур, Јони	V.	'97	50 Marshall St., No. Adams, Mass.
BOYLE, MARTIN	V.	'98	Newburyport, Mass.
Bradlee, Charles Walter	IX.	'97	113 Beacon St., Boston, Mass.
Bradley, William Dewey, $\Delta$ . T. $\Delta$ .	S.		Prospect Hill, Tacoma, Wash.
Brainerd, Edwin Alpheus	I.	'97	39 Olney St., Dorchester, Mass.
BRAMHALL, CHARLES THOMAS	II.	'97	139 Court St., Plymouth, Mass.
BREED, CHARLES BLANEY	I.	'97	12 George St., Lynn, Mass.
Breer, Louis Bennett	V.	'00	17 Henry Ave., Lynn, Mass.
Brenneman, J. B., Σ. A. E	V.	'97	Bethany, West Virginia.
Brewer, Arthur Francis	VI.	'98	Fayville, Mass.
Brewster, William	II.	'98	11 Court St., Plymouth, Mass.
BRICKLEY, WILLIAM JOSEPH	S.		68 Tremont St., Charlestown.
BRIGGS, ALBERT BILLINGS	1.	'00	2 Pleasant St. Pl., Boston, Mass.
Briggs, Charles Calvin, Jr., X. Φ	II.	'00	153 Craig St., Pittsburg, Pa.
BRIGHAM, EDMOND FRANCIS	VI.	'00	Newton Highlands, Mass.
BRIGHAM, THEODORE WILLIAM	XIII.		Carnegie Music Hall, New York.
BROOKS, MILES ELIJAH	I.	'98	19 Milford St., Boston, Mass.
BROOKS, PAUL RAYMOND	II.	'00	4912 Woodlaun Ave., Chicago, Ill.
Brown, Arthur Harrison	II.	'99	Reading, Mass.
Brown, Cardella Drake, Σ. A. E	VI.	'98	1470 Broad St., Hartford, Conn.
Brown, Carroll Wilder	I.	'99	Rye Beach, N. H.
Brown, Charles Hoyt	I.	'99	Wellesville, N. Y.
Brown, Clarence Clapp	VI.	'00	Reading, Mass.
Brown, Dickson Queen, A. B. Σ. X.	S.		Hotel Majestic, New York, N. Y.
BROWN, EDWARD PERCY	III.	'97	113 South Park St., Halifax, N. S.
Brown, George Winslow, X. Φ	V.	'99	839 Boylston St., Boston, Mass.
Brown, James Monroe	II.	'97	381 Park Ave., W. Mansfield, O.
Brown, John	I.		40 Durfee Ave., Fall River, Mass.
Brown, John Wesley	V.	'00	13 Forrester Ave., Newburyport.
Brown, Stephen Pearson, Σ. X	11.	'00	Dover, Me.

NAME AND FRATERNITY.	COURSE.	CLAS	S. HOME ADDRESS.
Brown, Warren Day, A.B. A. Δ. Φ.	VI.	'97	103 E. 39th St., New York, N. Y.
BUCK, HATTIE JOSEPHINE	VII.		60 Union St., Woburn, Mass.
BUCKLIN, MILTON POLLARD	VI.		40 Princeton Ave., Providence.
BUELL, CHARLES SEATON	II.	'97	6616 Yale Ave., Chicago, Ill.
BUFFUM, FREDERICK DELANO, B. O. II.	S.		Winchester, N. H.
BUGBEE, EDWARD EVERETT	III.	'00	Allerton St., Brookline, Mass.
BULLARD, LEWIS HINKLEY	II.	'00	Wellesley Hills, Mass.
BURCH, GUY PRENTICE	1.	'99	381 W. 3d St., Dubuque, Iowa.
BURDICK, HOWARD HENRY, Y. A. E	II.	'97	205 Sigourney St., Hartford, Conn.
BURGESS, PHILIP	XI.	'99	Otis St., Newtonville, Mass.
BURNHAM, FRANK ERWIN	X.	'00	Reading, Mass.
BURNHAM, GEORGE, A. K. E	IV.	'97	35 West St., Portland, Me.
BURNHAM, ROY GIBSON	VI.	'00	Essex, Mass.
BURNS, JAMES DENNIS, JR	I.	'00	5 Allen St., Salem, Mass.
BURR, ALICE MORVILLE	S.		119 Wyoming Ave., Melrose, Mass.
BURR, HELEN LOUISE, B.A	S.		119 Wyoming Ave., Melrose, Mass.
BURRILL, NATHAN CARTER	S.		17 Winter St., Newburyport, Mass.
BURROUGHS, KARL	X.	'00	11 Landers St., Somerville, Mass.
BUSBY, FRED EDWARD	V.	'97	Adams, Mass.
Bush, Walter Meiggs, E. A. E	11.	'97	4144 Clinton St., Brooklyn, N. Y.
BUTCHER, WILLIAM LARAMY	I.	'98	Lake View Ave., Camb'ge, Mass.
BUTLER, FERDINAND ALMON	VI.	'99	32 Hancock St., Salem, Mass.
BUTLER, WALTER HAROLD	II.	'99	212 Fir St., Akron, Ohio.
BUTLER, WINTHROP FESSENDEN	V.	'98	79 Tudor St., Chelsea, Mass.
BUTTERWORTH, ELWELL ROBERT	II.	'98	15 Harvard Place, Som'ille, Mass.
BYAM, LE ROY HENRY	I.	'98	337 Crescent St., Waltham, Mass.
CADE, MARION LOUISE	V.	'98	14 Clinton St., Cambrid'p't, Mass.
CAHN, EDGAR BERNARD	IV.	'co	Chicago, Ill.
CALDER, WALTER DOUGLAS		200	1903 Park Ave., Philadelphia, Pa.
CALDWELL, FREDERICK WILLIAM .	II.	'99	42 Stevens St., Winchester.
CAMPBELL, CHARLES FRANCIS F		'99	London, England.
CAMPBELL, DONALD CHENERY, A. T. A.		'98	83 Queen St., Lowell, Mass.
CAMPBELL, HARRY ANDREW BACH .	XI.	'99	London, England.
CAMPBELL, JOHN	1222	'00	Lincoln Ave., E. End, Pittsburg, Pa.
CAMPBELL, PERCY ALPHONSO		LOLD.	Derry, N. H.
CANNON, SYLVESTER QUAYLE	III.	'99	24 E.So. Temple St., Salt LakeCity.
CANNON, WILLARD T	II.	'99	24 E.So. Temple St., Salt LakeCity.
CAPEN, CARROLL ADAMS	X.	'97	Randolph, Mass.
CARR, JOSEPH LEWIS	S.	91	26 Watts St., Chelsea, Mass.
CARTER, ALLIE DEVERE	S.		1711 G St., Tacoma, Wash.
CARTY, JOHN EDWARD	I.	'97	6 Kensington St., Roxbury, Mass.
Case, Herbert Monroe	VI.	'99	109 Ann St., Hartford, Conn.
Cassidy, David Demorest, Jr., A.Δ.Φ.	II.	'97	24 Cumberland St., Boston.
CAYVAN, LLEWELLYN LEOPOLD	V.	200	660 Sixth St., So. Boston, Mass.
Chase, Ira Mason, Ir	1.	'98	37 Fifth St., New Bedford, Mass.
	1V.	00	85 Edmont Place, Detroit, Mich.
	VI.	'00	Lonsdale, R. I.
	S.	00	183 Hammond St., Bangor, Me.
를 보고 있었습니다. 그렇게 되는 사람이 있습니다. 전 등에 가지 않는 사람들이 되었습니다. 그 사람들	V.	200	59 Beech Glen St., Roxbury, Mass.
CHANDLER, EDNA MATILDA	٧.	'99	Sy Decen Gien St., Roxbury, Mass.

NAME AND FRATERNITY.	COURSE.	CLAS	s. HOME ADDRESS.
CHAPIN, EDWARD SAMUEL	V.	'98	23 Parker St., Boston., Mass.
CHAPMAN, EBEN LORD	I.	'00	Franklin Falls, N. H.
CHAPMAN, JAMES FINLAY, B.S	S.	'00	Mankato, Minn.
CHAPMAN, MARY BUGBEE	S.		121 Union St., Bangor, Me.
CHARLES, WALTER NATHAN	I.	'00	127 Eustice St., Roxbury, Mass.
Chase, Aurin Moody, B.S., A. Δ. φ.	S.		Comstock Ave., Syracuse, N. Y.
Chase, Frank David	III.	200	Hotel Monnett, Evanston, Ill.
Chase, Wendell Wyse, B. C. E., B.O. II.	S.	-	Foxcroft, Me.
CHRISTENSEN, WILLIAM OTTO	X.	'00	Belmont, Mass.
CHURCH, LENOIR CAMPBELL	IX.	'00	t Menlo St., Brighton, Mass.
Churchman, Albert Lawrence, θ.Ξ.	11.	'00	1311 Rodney St., Wilmington, Del.
CLAPP, FREDERICK GARDNER	III.	'00	169 Boston St., So. Boston, Mass.
CLAPP, HARVEY ROWLAND	111.	'00	Port Deposit, Md.
CLAPP, MARKEY ROWLAND	S.	00	Hotel Vendome, Boston, Mass.
		town	1301 Linden Ave., Baltimore, Md.
CLARK, CHARLES BEVAN, A.B	I.	97	207 Second St., Pittsfield, Mass.
CLARK, HENRY ARCHER	II.	97	Columbia St., Seattle, Wash.
CLARY, ROBERT HODGEN			624 W. 6th St., Davenport, Ohio.
CLAUSEN, RUDOLPH JULIUS	IV.	99	
CLEAVELAND, WALTER AVERY	II.	'98	West Newton, Mass.
CLEVELAND, ERNEST ELGIN	VI.	'00	121 Highl'd St., Somerville, Mass.
CLIFFORD, PAUL	II.	'98	Waverly Ave., Newton, Mass.
CLOW, PERCIVAL CHARLES	I.	'00	Orange, Mass.
CLUFF, CLARENCE BROOKS	V.	99	13 Columbia Park, Haverhill.
COBB, HERBERT FRANKLIN	II.	'98	Newton Centre, Mass.
Cobb, Herbert Luther	VI.	'97	Mansfield, Mass.
COBURN, HOWARD LINCOLN	II.	'98	143 Appleton St., Boston.
Coffin, Joseph George	VIII.	'98	635 Tremont St., Boston, Mass.
COLCORD, FRANK FOREST	III.	'98	3 Weld Ave., Roxbury, Mass.
COLEMAN, EZRA ABBOTT	VI.	'97	193 W. Newton St., Boston, Mass.
COLLIER, WILLIAM RAWSON, Σ. X	VI.	'00	296 Rawson St., Atlanta, Ga.
COLLINS, HOWARD BROWNING, Σ. A. E.	III.	'98	Denver, Col.
Collins, John Arthur, Jr	X.	'97	73 Cottage St., Fall River, Mass.
COMEY, CHARLES HENRY	II.	'00	3 Herbert St., Dorchester, Mass.
CONANT, FRANKLIN NORTON	VI.	'00	3 Wellington St., Boston.
CONANT, HAROLD SARGENT	VII.	'00	28 Pleasant St., Gloucester, Mass.
CONANT, JOHN BANCROFT	I.	'00	421 Massachusetts Ave., Boston.
Congdon, John Elliott	II.	'99	810 Second St., Fall River, Mass.
CONKLIN, HERBERT KING	IV.	'98	70 Heller Parkway, Newark, N. J.
CONSTANTINE, ARTHUR McGREGOR .	IX.		18 Strong St., Newburyport, Mass.
Cooke, Frederick Hosmer	I.	'00	102 Rockdale Ave., Cincinnati, O.
COOMBS, FRANK EUGENE	IV.	'98	26 Maverick St., E. Boston, Mass.
Cooper, Philip Benson, A. T. A	IV.	'00	Naval Academy, Annapolis, Md.
COPP, GEORGE IRVING	II.	'99	Rockingham Pl., Cambridgeport.
CORBETT, CHARLES WALTER, JR	VI.	'99	6 Rutland Sq., Boston.
CORLISS, CYRUS	VI.	'00	Randolph, Mass.
CORNELL, LEONORA C	S.		709 South 11th St., Lincoln, Neb.
CORNELL, WORTHINGTON	VI.	'98	Wellington, Mass.
CORNWELL, WILLIAM EAMES	VIII.		220 N. Wash. St., Rome, N. Y.
CORSE, WILLIAM MALCOLM	V.	'99	13 Oakland St., Medford, Mass.

NAME AND FRATERNITY, C	OURSE.	CLASS	. HOME ADDRESS.
Corson, William Bertrand	S.		55 Palfrey St., Watertown, Mass.
COTTER, WILLIAM EDWARD	S.		18 Skehan St., Somerville, Mass.
COTTING, CHARLES BURTON	X.	'00	West Newton, Mass.
COTTLE, GEORGE THURSTON	V.	'98	13 Copley St., Roxbury.
COURTIS, STUART APPLETON	VI.	'99	449 4th Ave., Detroit, Mich.
COWLES, LUZERNE SIMEON, Y. A. E	I.	'97	65 Forest St., Hartford, Conn.
Cox, Allen Howard	S.	"	248 Maple St., Holyoke, Mass.
CRANE, CHARLES FRANCIS	I.	'99	13 Charles St., Taunton, Mass.
CRANE, CHARLES SPENCER, Σ. A. E	IX.	'00	518 Adams St., Scranton, Pa.
CRANE, EVA HAYES	IV.	'98	56 Trowbridge St., Camb'ge, Mass.
CRAVEN, GEORGE WARREN	VI.	'99	Bozeman, Mont.
CRITTENDEN, SAMUEL HALLETT	111.	'00	Highwood, N. J.
CROCKER, ALLEN SWIFT	II.	'97	226 Kempton St., N. Bedf'd, Mass.
CROCKER, HARRY LONGFELLOW	I.	'00	102 Park St., Portland, Me.
CROWELL, LOUIS AUSTIN	I.	'00	East Dennis, Mass.
CROWELL, LUTHER ALBERTO	VI.	'98	West Dennis, Mass.
Cummings, Henry, Jr., S.B	IV.	'96	3 Union Park, Boston, Mass.
CURRIER, CHARLES RICHARDSON	II.	'97	285 Lamartine St , Jamaica Plain.
CURRIER, HARVEY LEON	II.	'98	Swampscott, Mass.
CURRY, WILLIAM, X. O	VI.	'99	Homeward Ave , Pittsburg, Pa.
CURTIS, ARTHUR VINTON	XIII.	'98	47 Elm St., Quincy, Mass.
CURTIS, EVERETT NICHOLS	IX.	'98	26 Cumberland St., Boston, Mass.
CURTIS, HARRY APPLETON, A.B	S.	20	28 Mt. Vernon St., Boston, Mass.
Cushing, Harvey Morse	VI.	'99	186 Maple Ave., Ottumwa, Ia.
Cushman, Frank, Jr	S.	"	17 White St., East Boston, Mass.
CUTLER, JANE RUTH, A.B	S.		70 Pearl St., Somerville, Mass.
CUTLER, WILLIAM HENRY, A. K. E.	IV.	'97	4801 Kenwood Ave., Chicago, Ill.
CUTTER, FRED BERTRAM	VI.	'97	16 Otis St., Wakefield, Mass.
CUTTING, GEORGE WARREN, JR	I.	'00	Weston, Mass.
DAGGETT, ELEANOR WILLIAMS	S.	200	116 Commonwealth Ave., Boston.
DAMON, HARRY SUMNER	II.	'99	Bryantville, Mass.
DANA, WM. SUMNER BARTON, Φ. Γ. Δ.	IV.	'98	46 Cedar St., Worcester, Mass.
DANFORTH, RAYMOND HUGHES	II.	'98	4 Arabella St., Salem, Mass.
Daniell, Jere Rogers	XIII.	'97	Franklin Falls, N. H.
Daniels, Nathan Hagar, Jr., S.B	VI.	'96	13 Joy St., Boston, Mass.
DARLINGTON, WILLIAM, M. E	S.	3	Butte, Mont.
DART, ALBERT CHARLES, JR	III.	'00	2106 7th Ave., Rock Island, Ill.
DART, CYRUS VICTOR	I.	'00	716 22d St., Rock Island, Ill.
DATER, PHILIP HERRICK, B.A	I.	'98	2236 6th Ave., Troy, N. Y.
DAVENPORT, MAURICE	II.	'00	360 Ocean Ave., Brooklyn, N. Y.
Davila, Jenaro	I.	'99	Monterey, Mexico.
Davis, Alvan Lamson	III.	'97	27 Albion St., Hyde Park, Mass.
Davis, Arthur True	II.	'98	639 Congress St., Portland, Me.
Davis, Charles Joshua	I.	30	No. Chelmsford, Mass.
DAVIS, HUNTLY WARD, A. Y	IV.	'98	709 Pine Ave., Montreal, Q.
Davis, Wilbur Ward	I.	'00	91 Webster St., Malden, Mass.
Davison, George Rupert	VI.	'98	33 M. St., So. Boston, Mass.
Dawes, Fred Bradley	S.	'98	Hudson, Mass.
DAY, MARY HARRIETT	S.	-	East Derry, N. H.
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NAME AND FRATERNITY.	COURSE.	CLAS	S. HOME ADDRESS.
DEAN, WALTER CLARK	. VI.	'00	Dalton, Pa.
DEAVITT, HENRY MCINTYRE, B.S.	. v.	'97	Montpelier, Vt.
DEGOLYER, ROBERT SEELY, P. B. E.		'98	1819 Hinman Ave., Evanston, Ill.
DELANO, MORRIS FRANCIS	. I.	'98	5 Walnut St., Somerville, Mass.
DELANO, PAUL HOLMES	. II.	'98	Kingston, Mass.
DELESDERNIER, FRED. MORTIMORE	. VI.	'00	Needham, Mass.
DEMERITT, LEONARD MORSE	. II.	'97	52 N. Main St., Natick, Mass.
DE WOLF, ARTHUR SIMON	. S.		Melrose Highlands, Mass.
DE WOLF, RICHARD CROSBY	. v.	'00	112 W. Concord St., Boston.
DEXTER, KATHARINE MOORE	. S.		2 Raleigh St., Boston.
DIMOCK, ELWIN HIBBERT			697 Washington St., Dor., Mass.
DIXON, CHARLES SUMNER		'98	1608 R St., N. W. Wash'ton, D. C.
Dixon, John Brown		'98	1608 R St., N. W. Wash'ton, D. C.
DODD, MARGARET ELIOT, S.B	. S.	-	58 Townsend St., Roxbury, Mass.
Dodge, Edwin Sherrill, A.B		'97	Newburyport, Mass.
Dodge, Frank Edward		'00	163 W. Canton St., Boston.
Dodge Irving Bigelow		'98	Grafton, Mass.
Dodge, Winthrop Rufus	. V.	'98	Newburyport, Mass.
DOLBEAR, KATHERINE ELLA	100	,	Tufts College, Mass.
DOLIBER, FRANKLIN WHITNEY, O. Z.		'97	Goddard Ave., Brookline, Mass.
DONNELL, HARRY DEANE	. S.	21	1105 Clarkson St., Denver, Col.
DONOVAN, JOHN AUGUSTINE		'97	256 Branch St., Lowell, Mass.
Dorey, William Asbury	. V.	'00	643 W. 4th St., Cincinnati, Ohio.
Doten, Alfred Russell	. II.	'97	8 Mayflower St., Plymouth, Mass.
Doty, George Francis, B.A	. VI.	'98	Pasadena, Cal.
DOUGHERTY, PROCTER LAMBERT .	. VI.	'97	417 Broadway, Cambridge, Mass.
Downes, Alfred Kimball. A. Y.	. I.	'97	5 Wash'ton Sq., Gloucester, Mass.
Dozier, Henrietta Cuttins		'99	Atlanta, Ga.
DRAKE, CHARLES SUMNER	. s.	99	1525 N. Rockwell St., Chicago, Ill.
Drake, Chester Francis, Σ. A. E.	. XI.	'97	42 Monum't St., W. Medford, Mass.
DRAPER, ROBERT MAY	. III.	'98	Fayville, Mass.
Drew, Albert Thompson	. X.	'97	86 Federal St., Newb'yport, Mass.
DRYER, JAMES CYRUS		'99	396 East Ave., Rochester, N. Y.
DUFF, ELLEN LORETTO	. S.	99	14 Sheafe St., Charlestown, Mass.
DUNBAR, HOWARD REGINALD		'00	Canton, Mass.
Du Pont, Irénée, Φ. B E	. X.	'97	Wilmington, Del.
DURGIN, CLARA ISABEL		'00	Belmont, Mass.
DURGIN, EDMUND HORACE		'00	175 Newbury St., Boston.
DWIGHT, WILLIAM BARLOW, Y X.		'00	1323 Davis St., Evanston, Ill.
	. IV.	'97	4378 Wash'ton Av., St. Louis, Mo.
EAMES, CHARLES HOLMES	VI.		Andover, Mass.
EATON, HENRY CHARLES	. II.	'97 '99	50 Taylor St., Waltham, Mass.
EATON, WILLIAM WISE, A. Y	. II.	'97	Bridgewater, Mass.
		'00	Portland, Oregon.
EBERHARDT, HERMAN	. v.	'98	86 Franklin St., Camb'port, Mass.
EDMANDS, FREDERICK LINCOLN .	400	200	29 Broad St., Newburyport, Mass.
	. п.	'97	11 Tremlet St., Dorchester, Mass.
EDSON, WARREN ADAMS	. н.	'00	
ELBERT, SAMUEL BASS, X. 4	. v.	000	1030 21st St., Des Moines, Iowa.
ELLERY, JAMES BENJAMIN	, y.	'99	Annisquam, Mass.

NAME AND FRATERNITY, C	OURSE.	CLAS	S. HOME ADDRESS.
ELLIS, CARLETON	V.	'00	Keene, N. H.
ELLIS, DAVID ALFRED	S.		Norwood, Mass,
ELSON, ARTHUR, A.B	X.	'97	49 Fort Ave., Roxbury, Mass.
EMERY, EARLE CALDWELL	II.	'98	80 Congress St., Bradford, Pa.
EMERY, GEORGE WEBSTER	III.	'00	6 Mystic St., Charlestown, Mass.
EMERY, LEWIS, 3d	VI.	'99	So Congress St., Bradford, Pa.
Evans, David Howard	II.	'00	1513 N. 19th St., Philadelphia, Pa.
EVERETT, FRANK WARREN, P. B. E	VI.	'97	Highland Park, Ill.
EVERETT, FREDERIC ELWIN	I.	'00	Elkins, N. H.
EVERETT, JULIAN FRANKLIN	S.	0.000	Madison, Wis.
EWEN, MALCOLM FAULKNER, Ф. В. Е.	IV.	'97	194 Huntington Av., Boston, Mass.
EWING, CHARLES	IV.	'97	1603 Rigg Pl., Washington, D. C.
EWING, WILLIAM CLINTON	VI.	'97	Danvers, Mass.
FAIRBANKS, WILLIAM KENDALL	VI.	'97	213 Newbury St., Boston, Mass.
FARNUM, DWIGHT	III.	'99	24 Elm St., Brookline, Mass.
FARWELL, RAYMOND EVERETT	II.	'00	Turner's Falls, Mass.
FAUGHT, RAY CLINTON	VI.	'98	Sidney, Me.
FAXON, WILLIAM ALECK, Χ. Φ	V.	'97	170 Linwood Ave., Buffalo, N. Y.
FEARING, ALBERT JUSTIN	I.	'98	South Weymouth, Mass.
FEELEY, FRANK GOODRICH	II.	'97	103 Appleton Ave., Pittsfield, Mass.
FENNER, DAVID COLTON, PH.B	S.	21	211 Fountain St., Providence, R. I.
FERGUSON, FINLEY F., A.B., B.S., Σ.X.	IV.	'98	166 Freemason St., Norfolk, Va.
Ferguson, John Berton	I.	'99	Woburn, Mass.
FERGUSON, ROBERT ARTHUR	II.	'99	489 Broadway, South Boston.
FERRIS, ROBERT MURRAY, JR	VI.	'97	Poughkeepsie, N. Y.
FIELD, FREDERICK CROMWELL, D. B. E.	VI.	'97	158 Hicks St., Brooklyn, N. Y.
FIELD, LEONARD H., JR., A.B., X	IV.	'99	804 W. Main St., Jackson, Mich.
FIFIELD, ETHEL FRANCES, A.B	S.	99	17 Pleasant St., Salem, Mass.
FIFIELD, FREDERICK ALONZO	II.	'99	Methuen, Mass.
FISCHER, ADOLPH LOUIS	VI.	'00	Salem, Mo.
FISHER, HOWELL, A. K. E	Χ.	'98	105 Howland St., Roxbury, Mass.
Fiske, George Isaac, 4. B. E	VI.	'97	50 Elmore St., Roxbury, Mass.
FITCH, FRANCIS THEODORE	III.	'co	Watertown, N. Y.
FITCH, STANLEY GAY HYDE, A. K. E.	X.	'00	14 Morrill St., Dorchester, Mass.
FITZGERALD, JOHN WATSON, S. B	VI.	'97	Grand Rapids, Mich.
FITZPATRICK, WILLIAM LEO		'00	269 Webster St., E. Boston, Mass.
FLANDERS, HERBERT MERRITT	I.	'00	291 Clifton St., Malden, Mass.
FLEET, JOHN WALLACE, S. A. E.	I.	'98	85 Park St., Fall River, Mass.
FLEISHER, SIMON	VI.	'98	24 Norman St., Boston, Mass.
FLEMING, CHARLES EDWIN	II.	'98	155 E. Main St., Spartanburg, S.C.
FLEMINGS, JOHN ALBERT	VI.	'99	333 High St., Lowell, Mass.
FLYNN, WILLIAM BURWELL	VI.	'99	64 Calhoun St., Springfield, Mass.
FOGERTY, EMORY HARTWELL	XIII.	'98	51 John St., Worcester, Mass.
FOGG, FRANK BATCHELDER	S.	90	Hampton Falls, N. H.
FOOTE, ARTHUR BURLING	I.	'99	Grass Valley, Cal.
FORREST, MABEL FLORA	VII.	'98	227 Westford St., Lowell, Mass.
FORKEST, MABEL FLORA	VI.	'00	128 Pritchard St., Fitchburg, Mass.
FOSTER, FLOYD J	III.	'00	705 Times Building, Pittsburg, Pa.
FOULKES, EDWARD	IV.	'99	821 Front St., Portland, Me.
TOURNES, DUWARD		39	over a controlly a ordinary me.

NAME AND FRATERNITY.	COURSE.	CLASS	s. HOME ADDRESS.
FOWLE, FRANK FULLER	VI.	'99	557 Columbus Ave., Boston, Mass.
FOWNES, WILLIAM CLARK	X.	'98	Pennsylvania Ave., Pittsburg, Pa.
FOX, WILLIAM HENRY, Σ. X	IV.	'97	420 E. Merrimack St., Lowell.
FOYE, FREDERIC ELMER	III.	'00	183 Ash St., Brockton, Mass.
FRAME, JAMES THOMAS	VI.	'99	Dana Ave., Hyde Park, Mass.
FRANK, MORTIMER	I.	'97	233 Hamden Ct., Chicago, Ill.
FRANKLIN, ARTHUR IRA	V.	'97	115 Bellevue St., Newton, Mass.
FRASER, MATILA ALEXANDRA	IV.	'99	Cleveland, Ohio.
FRAZER, ROBERT, JR., Δ. Ψ	IV.	'99	209 S. 3d St., Philadelphia, Pa.
FRAZIER, CHARLES WELLINGTON	VII.	'97	50 Mall St., Lynn, Mass.
FRENCH, ABRAM	I.	'98	Dedham, Mass.
FRINK, FRANCIS GUY	I.	'00	604 30th Ave. S., Seattle, Wash.
FRINK, GERALD	11.		604 30th Ave. S., Seattle, Wash.
FROTHINGHAM, BROOKS, A. B	IV.		339 Marlboro St., Boston.
FRYE, ALBERT IRVIN	I.	'98	Alameda, Cal.
FULLER, GEORGE ARTHUR, O. B. E	VI.	'97	152 N. Main St., Springfield, Mass.
FULTON, WILLIAM HOWARD	X.	'00	Chelmsford, Mass.
Fyfe, James L	IV.		417 Home Ave., Oak Park, Ill.
GAGE, DU RELLE, D. B. E	S.	'99	The Chelsea, New York City.
GAGE, FRANK DE MERITTE	II.	'00	Bradford, Mass.
GAILLARD, LAWRENCE LEE, A. T. Q	VI.	'97	45 East Bay, Charleston, S. C.
GALE, GARDNER MANNING	IV.	'99	Olean, N. Y.
GALLAGHER, EDWARD GERALD	VI.	'00	So. Framingham, Mass.
GALLISON, ERNEST AUGUSTUS	II.	'98	144 Shurtlefs St., Chelsea, Mass.
GARDNER, LESTER DURAND	IX.	'98	Detroit, Mich.
GARDNER, STEPHEN FRANKLIN	II.	'00	401 Charles St., Boston.
GARRETT, CHRISTINA HALLOWELL	IV.	'99	Philadelphia, Pa.
GASKILL, CHARLES SUTTER	II.	'99	Mt. Holly, N. J.
GAUSS, CARL FREDERICH	IX.	'00	58 Lake View Ave., Camb'ge, Mass.
GEHRING, EDWIN WAGNER	I.	'99	137 Walton Ave., Cleveland, Ohio.
GEIGER, ARTHUR WILLIAM	III.	'00	350 Beacon St., Boston.
GERBER, ELMER LOUIS. Σ. A. E	IV.	'99	21 S. Terry St., Dayton, Ohio.
GIBBS, GEORGE CROCKER	I.	'00	176 Pleasant St., New Bedf'd, Mass.
GIBSON, AUSTIN ELY	VI.	'00	41 Hayward St., Cleveland, Ohio.
GIFFORD, RICHARD TRACY	VI.	'99	20 Pearl St., Fitchburg, Mass.
GILL, JAMES SEEL	II.	'99	Ludlow, Vt.
GILLSON, CHARLES BURTON	X.	'99	1554 Oak Ave., Evanston, Ill.
GILMAN, WALTER EASTMAN	I.	'99	202 S. Centre St., Marshallt'wn, Ia.
GILMORE, JONATHAN MONROE, B.L.	VI.	'97	Pasadena, Cal.
GILPIN, RUSSELL	VI.	'99	1304 Brown St., Wilmington, Del.
GILSON, CLAUDE ULMUS	. II.	'00	Wellesley Hills, Mass.
GILSON, HENRY ROBBINS	. II.	'00	Groton, Mass.
GLADDING, JOHN THOMAS FISKE	II.	'98	573 Potters Ave., Providence, R. I.
GLEASON, GEORGE HATHAWAY	. II.	'99	54 Bowdoin St., Dorchester, Mass.
GLEASON, WALTER AUSTIN	Ι.	'97	44 Wyoming Ave., Malden, Mass.
GLOVER, GEORGE CURTIS	IV.	'99	Melrose Highlands, Mass.
GLOVER, RUSSELL HENRY, X	. III.	'00	Harrington, Me.
GODBOLD, CHARLES HENRY, JR	XIII.	'98	150 Trenton St., E. Boston, Mass.
Goddard, John Newton	. V.	'98	205 E. 9th St., Plainfield, N. J.

NAME AND FRATERNITY.	COURSE.	CLAS	S. HOME ADDRESS.
GODFREY, LUCIUS WILLIAM, JR	S.		793 Prospect Ave., Buffalo. N. Y.
GODFREY, WILLIAM HOLLIS, Ph.B.	S.		Needham, Mass.
Godley, George McM., A. K. E	VI.	'98	Sherman Sq. Hotel, New York.
GOLDSMITH, CLARENCE	II.	90	Andover, Mass,
GOLDSMITH, CLARENCE	I.	lan	19 Bigelow St., Brighton, Mass.
	III.	'99	Monterey, Mexico.
GONZALEZ, ALBERTO PRIMITIVO	X.	'99 '98	Stockbridge, Mass.
GOODRICH, ARTHUR LINSLEY GOODRIDGE, FREDERICK STANLEY	II.	'00	
GOODSPEED, GEORGE MARSTON	V.		101 High Rock Ave., Lynn, Mass. Hyde Park, Mass.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	IX.	97	Weston, Mass.
GOWELL, LOUIS NELSON	I.	'97	Wakefield, Mass.
GRABAU, PHILIP LOUIS	S.	97	154 Maple St., Buffalo, N. Y.
	XIII.	'00	Pittsburg, Pa.
GRAFF, SHELDON DERMITT	II.	'00	
GRANT, HARRY LAMAR GRAY, ALBERT WEBSTER, Σ. X	I.	'98	520 Greenup St., Covington, Ky. 38 Stanley St., Dorchester, Mass.
	VI.		651 Fairmont Ave., St. Paul, Minn.
Greene, B. W. Batchelder, Δ. Ψ	XII.	97	50 rue Bassane, Paris, France.
GREENLAW, CHARLES RUTHERFORD .	II.		19 Atherton St., Roxbury, Mass.
	S.	'99	Mystic, Conn.
GREENMAN, BESSIE, B.A	III.	'99	New Castle, Pa.
GRIFFIN, ARTHUR EUGENE	VI.	99	Winthrop, Mass.
GROSVENOR, ASA WATERS, V. Y	II.	'98	Amherst, Mass.
GROSVENOR, ASA WATERS, T	VIII.	'99	16 Grover St., Lynn, Mass.
GURNEY, EWING RUDOLPH	XIII.	'99	40 Lee St., Cambridge, Mass.
GUTTRIDGE, JAMES ADDISON	I.	'97	Garden St., Roslindale, Mass.
GUY, JAMES RINGOLD, B.S	II.	'98	to Fenchurch St., Norfolk, Va.
HALE, BENJAMIN, JR	S.	90	Newburyport, Mass.
HALL, GEORGE ANTHONY	IX.	'00	30 Exeter St., Boston, Mass.
HALL, MILTON WESTON	VII.	'co	Evanston, Ill.
HALL, ROBERT GEORGE	V.	'97	Pittsburg, Pa.
HALL, STEPHEN MINARD	VI.	'00	427 Park Ave., Waverly, N. Y.
HALLSTROM, WALTER AUGUSTUS	S.	-	Roslindale, Mass.
Ham, Clara Eleanor	VII.	'99	North Middleboro, Mass.
HAMBURGER, CHARLES MEIER	Х.	'99	22 Dracut St., Dorchester, Mass.
Hamilton, Alfred Starr, A. T. A	IX.	'97	249 Lark St., Albany, N. Y.
Hamilton, Arthur Little, O. E.	II.	'99	45 Forest St., Fond du Lac, Wis.
HAMLEN, HARRY HOWARD, Z. Ψ	S.	33	20 Pleasant St., Augusta, Me.
HAMMOND, CHARLES LINCOLN	I.	'97	Atlantic, Mass.
HAMMOND, CLIFFORD ROBSON	VI.	'00	294 Penna. Ave., Buffalo, N. Y.
HAMMOND, EDWARD HOSMER, P. B. E.	V.	'99	Newton Centre, Mass.
HAMMOND, EDWIN WALDEN	I.	'99	Asbury Park, N. J.
Hanson, Harry Christian	V.	'00	72 Munroe St., Roxbury, Mass.
Hapgood, Cyrus Howard, Δ. Υ	VI.	'00	484 Broadway, Everett, Mass.
HAPGOOD, LYMAN PROCTOR	I.	'99	Athol Centre, Mass.
HARAHAN, JAMES THOMAS, JR., S. X.	II.	'99	135 51st St., Chicago, Ill.
HARPS, HARRY MACY	1.	'00	Nantucket, Mass.
HARRIMAN, SUSAN SIGOURNEY	S.	-	Revere, Mass.
HARRIS, RALPH	II.	'98	620 Miami St., Leavenworth, Kan.
HARRISON, ALFRED WILLIAM	III.	'99	210 W. Lake St., Minn'p'lis, Minn.
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NAME AND FRATERNITY.	COURSE.	CLASS	s. HOME ADDRESS.
HARRISON, RICHARD CARTER	S.		Braintree, Mass.
HARTT, WILLIAM STEPHEN	I.	'00	285 Fairmount St., Hyde Park.
HARWOOD, CHARLES FRANK	II.	'99	Warren, Mass.
Hasbrouck. Ross	VIII.	'99	75 Market St., Poughkeepsie, N.Y.
HASELTON, BARTON	II.	'00	118 W. Garden St., Rome, N. Y.
HASKELL, GEORGE OWENS, K. A	II.	'98	88 State St., Savannah, Ga.
HASKINS, CHARLES NELSON	VIII.	'97	87 Chestnut St., New Bedford.
HATCH, GEORGE FRANKLIN	S.		Dedham, Mass.
HATCH, ISRAEL, JR	X.	'97	Hanover, Mass.
HATHAWAY, HAROLD W	S.	"	107 Mass. Ave., Arlington, Mass.
HAWES, ALEXANDER G., JR., Σ. A. E.	VI.	'98	Mills Building, San Francisco, Cal.
HAWKINS, EDGAR MARVIN	II.	'97	107 Maple St., W. Roxbury, Mass.
HAYDEN, FRED LAWRENCE	X.	'98	28 Holt St., Fitchburg, Mass.
HAYDEN, JOSEPH ALONZO	S.	90	East Hartford, Conn.
HAYDEN, LEWIS ANDREWS, E. X	II.	'97	1637 Sherman Ave., Denver, Col.
HAYWARD, NATHAN, A.B	VI.	'97	85 Brattle St., Cambridge, Mass.
HAYWARD, ROYAL HOBART	VI.	'97	18 Holborn St., Roxbury, Mass.
HAZARD, WILLIAM ABBOTT, E. X.	S.	91	723 3d St., Des Moines, Ia.
HAZELTINE, BENJAMIN PRESCOTT, JR.	VI.	'99	Belfast, Me.
	VI.	'98	Warren, Pa.
HAZELTINE, JAMES EZRA	VI.	0.20	602 Tremont St., Boston, Mass.
HEALEY, BENJAMIN FRANCIS	II.	97	East Providence, R. I.
HEALY, FREDERICK ELLIOTT			Wheeling, West Virginia.
HEARNE, WILLIAM LOWDER	I.	'00	Dayton, Ohio.
HEATHMAN, FRANK BOLTIN	IV.	97	
HECKLE, GEORGE ROGERS	I.	99	55 Moreland St., Roxbury, Mass.
HEGHINIAN, GARABED G., A.B	I.	'99	Marash, Turkey.
HEISLER, EDWARD RUDOLPH, Σ. X	V.	'97	4427 Grand Boulevard, Chicago.
HEITSHU, SAMUEL PARKS	VI.		512 E. King St., Lancaster, Pa.
HEMMINGS, FREDERICK JOHN	V.	'97	9 Sussex St., Boston, Mass.
HENRY, RALPH COOLIDGE, S.B	S.		Watertown, Mass.
HERBERT, EDWARD	VI.	'99	Broad Run, Va.
HERING, OSWALD C., Δ. K. E	IV.	'97	277 Pearl St., New York, N. Y.
HERMAN, BERNARD	I.	'99	738 7th St., N. W. Wash'n, D. C.
HERMANNS, FRANK EDWARD	I.	'99	400 Broadway, Denver, Col.
HERN, JOSEPH LOUIS	VI.	'99	34 Sidney St., Dorchester, Mass.
HEWINS, LYMAN FOSTER	XIII.	'98	353 Wash'n St., Dorchester, Mass.
HEWITT, ED. HAWLEY, A.B., A. $\Delta$ . $\Phi$ .	S.		Red Wing, Minn.
HICKS, ANNA CORDELIA	S.		Cheyenne, Wyo.
Higgins, John Mitchell, X. Φ	III.	'00	25 Boswell Ave., Norwich, Conn.
HIGH, CARL STOUT	VI.	'98	Arlington, Kansas.
HILDRETH, EDWARD THEODORE	S.		The Gables, Brookline, Mass.
HILL, GRACE MARY	S.		62 Market St., Amesbury, Mass.
HILL, WILLIAM GILBERT, JR	V.	'97	84 Converse Ave., Malden, Mass.
HINCKLEY, BENJAMIN STEARNS	II.	'98	Woburn, Mass.
HINCKLEY, EVERETT HALE	VI.	'99	Hyannis, Mass.
HINMAN, DEAN	II.	'99	158 Williams St., Taunton, Mass.
HINMAN, WALTER HIBBARD	X.	'99	29 Albano St., Roslindale, Mass.
Hodsdon, Charles Wentworth .	II.	'00	148 Allston St., Cambridgeport.
HOEFLER, PHILO REMINGTON, B.S	S.		Ilion, N. Y.
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NAME AND PRATERNITY.	COURSE.	CLASS	s. HOME ADDRESS.
HOIT, HENRY FORD, A. K. E	S.		3916 Lake Avenue, Chicago, Ill.
HOLABIRD, ROBERT GRANT, Σ. X.	IV.	'99	1500 Oak Ave., Evanston, Ill.
HOLBROOK, GEORGE MYRON	II.	'00	116 Chestnut St., Cambridgeport.
HOLLIDAY, ALEXANDER R., X. Φ	I.	'99	601 N. Meridan St., Indianapolis.
HOLMES, EDWARD LOWTHER, A. T. A.	S.		Alameda, Cal.
HOLMES, MERTON AUSTIN	II.	'99	Newton Highlands, Mass.
HOOKER, STANLEY AGAR	II.	'98	3639 Reading Road, Avondale, O.
HOPEMAN, BERTRAM CORNELIUS	IV.	'00	39 Lake View Pk., Roch'er, N. Y.
HOPKINS, ARTHUR THOMAS	XI.	'97	9 Flint Ave., Somerville, Mass.
HOPKINS, HEBER AUGUSTUS	II.	'98	276 Pearl St., Cambri'port, Mass.
HOPKINS, ROBERT MILNE	VI.	'00	610 Cambridge St., Allston, Mass.
Hopwood, Cora Stella	VIII.	'00	205 Austin St., Worcester, Mass.
Horgan, John Dennis		'98	1 Leeds St., Dorchester, Mass.
Horsey, Outerbridge, Jr., A.B	VI.	'98	Burkittsville, Md.
HORTON, FRANK NELSON	XIII.	'99	Southbridge, Mass.
HORTON, RALPH TUCKER	I.	'98	Foxboro, Mass.
Hosford, Roger Fuller	. V.	'97-	19 Burlington Ave., Boston, Mass.
Hosmer, George Leonard	. I.	'97	350 Salem St., Woburn, Mass.
Hough, Elizabeth E	S.		48 Rutland Sq., Boston, Mass.
HOUGH, WILLIAM BALDWIN, Δ. Υ		'00	705 W. 3d St., Williamsport, Pa.
House, John Henry, Jr	. IV.	'98	Salonica, Turkey.
HOWARD, ARTHUR FISKE, B.S., X. 4.		'98	56 Middle St., Portsmouth, N. H.
HOWARD, ETHAN HENRY, A. Y.		'97	141 W.Chippewa St., Buffalo, N.Y.
Howard, Harold Emmons		'99	Westfield, Mass.
HOWARD, SHELDON LEAVITT, Φ. B. E.		'97	46 Somerset Ave., Taunton, Mass.
Howe, Herbert Holmes		'00	13 Townsend St., Roxbury, Mass.
Howes, Benjamin Alfred		'97	36 Marlboro St., Keene, N. H.
HOWLAND, JOHN HASTINGS, Σ. A. E.		'97	2 Wellington St., Boston, Mass.
HOWLAND, RICHARD STANLEY, O. E.		97	69 Manning St., Providence, R. I.
HOXIE, TIMOTHY WRIGHT, O. E	. II.	'99	244 Walnut Ave., Roxbury, Mass.
HUBBARD, CHESTER DIMOCK		'97	134 W. Newton St., Boston, Mass.
HUBBARD, JESSE BRANCH	. IV.		79 Francis Ave., Pittsfield, Mass.
HUBBARD, WILLIAM HENRY			Charleston, S. C.
HUBBARD, WINIFRED DEAN	. XI.	'98	Concord, Mass.
HUGHES, CHARLES HAYNES	. II.		5 Concord Sq., Boston, Mass.
HUME, GEORGE SEWARD	VI.	'99	Eastport, Me.
HUMPHREY, SETH KING	. S.	1	16 Berwick Park, Boston, Mass.
Humphreys, Walter, Δ. K. E		97	Humphreys Pl., Dorchester, Mass.
HUNNEWELL, FREDERICK ALLEN .		97	18 Orchard St., Cambridge, Mass.
HUNT, HARRY BURLEIGH, Σ. X HUNT, HARRY DRAPER		97	378 7th St., Brooklyn, N. Y.
HUNT, HARRY LEIGH	VI.	97	North Attleboro, Mass. Willimantic, Conn.
			108 Court St., New Bedford, Mass.
			526 West St., Rochester, N. Y.
HUNTINGTON, GEO. DANFORTH, A.B. HURD, BENJAMIN, S.B., Ø. B. E.	200		11 Waverly St., Brookline, Mass.
HURD, WILLIAM ROBINSON	. II.	97	8 Butler St., Dorchester, Mass.
HÜRTER, CHARLES SWANBERG		'97	21 Water St., Hyde Park, Mass.
HUSE, ARTHUR WOOD			Newburyport, Mass.
HUSSEY, JAMES WHITTLESEY			1531 Cherry St., Toledo, Ohio.
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NAME AND FRATERNITY.	COURSE.	CLASS	, HOME ADDRESS.
HUTCHINSON, GEORGE ANTHONY .	. II.	'98	14 Wales St., Dorchester, Mass.
HYDE, ANNA FARWELL	. S.		380 Commonwealth Ave., Boston.
HYDE, WILLIAM FRANCIS	. S.		79 Beacon St., Hyde Park, Mass.
ILSLEY, JOHN PARKER, JR., D. V	. II.	'97	E. Walnut Av., Germantown, Pa.
	. II.	'00	619 Broadway, Kingston, N. Y.
INGALLS, HARRY CREIGHTON, A. K. I	E. IV.	'o8	229 Ocean St., Lynn, Mass.
JACKSON, ALLEN W., A. K. E		'97	33 Coolidge St., Brookline, Mass.
JACKSON, GEORGE OTIS	. S.		Lexington, Mass.
JACKSON, HENRY DOCKER	. VI.	'97	Hotel Oxford, Boston, Mass.
Jackson, Willard Franklin		'00	560 Summer St., Campello, Mass.
JACOBS, ELBRIDGE CHURCHILL	. III.	'97	38 Mt. Vernon St., Malden, Mass.
JACOBY, ARELI HULL	. V.	'98	144 W. F'klin St., Wilkesbarre, Pa.
JAMES, HENRY PHILIP		'99	Kendall Green, Mass.
	. III.	'00	125 St. Botolph St., Boston.
JENNINGS, ARTHUR LEWIS		'97	Deep River, Conn.
JENNINGS, LEVI BROWN		'00	Weston, Mass.
JENNINGS, WALTER UPHAM		'00	Newton Lower Falls, Mass.
Johnson, Arthur Albert, A.B.			Irvington, Ind.
Johnson, Carl Francis		'00	120 Sycamore, St., Milwaukee, Wis.
Johnson, Charles Chaplin		'00	Danversport, Mass.
Johnson, Daniel Stewart		-	Short Hills, N. J.
Johnson, Edward, Jr., O. E		'98	178 Marlboro St., Boston, Mass.
Johnson, Harry George, 4. B. E.	. v.	'99	Auburndale, Mass.
Johnson, Josephine Forbush	. s.	99	393 Beacon St., Boston, Mass.
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Johnson, Lane		'98	67 Westland Ave., Boston, Mass.
		'99	207 W. 84th St., New York City.
Jones, Bassett, Jr., A. Y.	100	'98	Needham, Mass.
Jones, Frederic Alexander		'98	South Lincoln, Mass.
Jones, Frederick Hooper		'98	South Lincoln, Mass.
Jones, Harold Wellington		95	228 W. 7th St., Cincinnati, Ohio.
JONES, SAMUEL FOSDICK, Δ. Ψ.		ton	207 W. 84th St., New York City.
JONES, SULLIVAN WILLIAMS, Δ. Υ.	. XIII.	'00	31 Chester St., Somerville, Mass.
JOUETT, HENRY DETRICT		'00	Auburndale, Mass.
KATTELLE, WALTER ROBY	1000		University Road, Brookline, Mass.
KAUFMAN, IRVIN HAYES		'98	
KEENE, ARTHUR SAMUEL		'98	4t Murdock St., Brighton, Mass.
KEISKER, FRANK HENRY	477	'97	535 E. Chestnut St., Louisville, Ky.
	. VI.	'00	North Easton, Mass.
KEITH, SIMEON CURTIS, JR., S.B	. S.		4 Romsey St., Dorchester, Mass.
	. II.	'98	914 N. 6th St., Burlington, Iowa.
KELLEY, WILLIAM			118 Mt. Wash'n St., Lowell, Mass.
KELLOGG, FRANKLIN MINER		'98	West Stanford, Conn.
- CONTROL OF THE PROPERTY OF T	. S.		Meade Ave., Passaic, N. J.
	. V.	'99	388 Broadway, Somerville, Mass.
KENDALL, ROBERT EVERETT	. V.	'98	193 Fairmont Ave., Hyde Park.
KENISTON, JAMES AUGUSTUS			Hospital for Insane, Middletown.
KENNEDY, MILDRED			Readville, Mass.
KENT, WILLIAM ALBERT	. I.	'96	496 Columbus Ave., Boston, Mass.
KEYS, HARRY MONTIFIX	. VI.	'99	Linden, Md.

NAME AND FRATERNITY.	COURSE.	CLASS	s. HOME ADDRESS.
KILLAM, JAMES WARREN	I.	'97	Reading, Mass.
KIMBALL, FRED LEWIS HOLT	III.	'99	Newton Lower Falls, Mass.
KIMBALL, WALTER EVERARD	XIII.	'98	1 Robin Hood St., Dorchester.
KIMBERLY, ALBERT ELLIOTT	V.	'97	8 Lester Pl., Jamaica Plain, Mass.
KING, GEORGE ILGENFRITZ	S.	100	Middletown, Pa.
KING, WILLIAM BRAMAN	VI.	'97	11 Merlin St., Dorchester, Mass.
KINGMAN, WILLIAM ALDEN	V.	'99	South Framingham, Mass.
KINGSBURY, IVY ANNA	S.		237 Park St., Newton, Mass.
KINSMAN, WILLIAM ABBOT, O. E	II.	'99	24 Church St., Salem, Mass.
KLEINSCHMIDT, FREDERICK	S.		34 Savin St., Roxbury, Mass.
KNIGHT, GEORGE HORACE	II.	'97	Hudson, Mass.
KNIGHT, GEORGE WASHINGTON	V.	'00	38 Rosseter St., Dorchester, Mass.
Koch, Carleton Spayth, X. ф	V.	'98	1140 Main St., Buffalo, N. Y.
KRUSE, CONRAD FREDERICK, Φ. Δ. Θ	IV.	'99	518 W. 5th St., Davenport, Iowa.
KUTTROFF, EDWIN	X.	'98	17 E. 69th St., New York City.
LACAFF, FLORIAN LEO	S.		Nevada, Mo.
LACY, ROBERT, A.B	I.	'98	1630 Linden Ave., Baltimore, Md.
LAING, MINERVA ABIGAIL	S.		Granville, N. Y.
LAMB, AUGUSTUS CLARK, A. T. A	X.	'97	26 Mt. Vernon St., Camb'ge, Mass.
LAMBERT, FRED DE FOREST	VII.	'99	283 Pawtucket St., Lowell, Mass.
LANDER, RUTH ELLA	S.		12 Story St., Cambridge, Mass.
LANE, EDWARD PERCY	I.	'98	Manchester, Mass.
Langford, Grace	VIII.	'98	Chiltonville, Plymouth, Mass.
LANSINGH, VAN RENSSELAER B.S	S.		5109 Kimbark Ave., Chicago, Ill.
LARCOMBE, JOHN SOUTHEY, JR		'00	1815 H. St.N.W., Wash'gton, D C.
LARRABEE, JOHN HEBER	I,	'98	34 Foster St., Melrose, Mass.
LATHROP, FRED HASKINS	I.	'99	10 Summer St., Charlesto'n, Mass.
LAWLER, GEORGE SHERRIFFS	VI.	'97	259 Webster St., E. Boston, Mass.
LAWLEY, ARTHUR CROSBIE	II.	'98	60 N St., S. Boston, Mass.
LAWLEY, FREDERICK DAMON	XIII.	'00	47 M St., S. Boston, Mass.
LAWRENCE, AMOS AMORY, A.B	S.		59 Commonwealth Ave., Boston.
Lawrence, Herbert Everett	VI.	'99	Ayer, Mass.
LAWRENCE, LEWIS MORSE	IV.	'00	9 Brant St., Dorchester, Mass.
LEACH, GEORGE HENRY	III.	'00	Campello, Mass.
LEACH, ROBERT HOWLAND	II.	'00	28 W. Elm St., Brockton, Mass.
LEACH, WILLIAM HENRY, JR	II.	'97	176 Macon St., Brooklyn, N. Y.
LEADBETTER, FLORENCE EUGENIE .	S.		867 South St., Roslindale, Mass.
LEARNARD, HARRINGTON DE WITT .	S.		50 Worcester St., Boston.
Learned, Ernest Freeman	VI.	'97	15 Irving St., Watertown, Mass.
LEARNED, WILLIS LATHROP	V.	'98	15 Irving St., Watertown, Mass.
LEARY, CHARLES ARTHUR	II.	'00	79 Charles St., Waltham, Mass.
LEATHERBEE, ALBERT THOMPSON .		,00	85 Westland Ave., Boston.
LEAVITT, HENRY FOSS	I.	'99	Saco, Me.
Le Baron, Frederic Nelson, Δ. Υ	IV.	'97	7 Courtland St., Middleboro, Mass.
LEE, WALTER HENRY	IV.	'98	Home City, Ohio.
LEE, WILLIAM LOUIS	VI.	'97	1319 Hinman Ave., Evanston, Ill.
Leeds, Charles Tileston	IV.	'00	Newton, Mass.
Leiper, James Gerhard	II.	'99	1602 Masters St., Philadelphia, Pa.
Lennan, Thomas Frank	V.	'99	Belmont, Mass.

NAME AND FRATERNITY,	COURSE,	CLASS	s. HOME ADDRESS.
LEONARD, CLIFFORD MILTON, A. T. A.	I.	'00	2501 Michigan Ave., Chicago, Ill.
Leonard, Owen Lewis	V.	'98	Newton Centre, Mass.
Lewis, Clancey Montana	III.	'99	Ketchum, Idaho.
Lewis, James Edward	I.	'97	1357 B'dway, W. Somerville, Mass.
LEWIS, JOSEPH ELLIOT	II.	'99	Centreville, Mass.
Lewis, Rondel	V.	'00	21 Hillside Ave., Malden, Mass.
LIPPINCOTT, JESSE TREADWELL	X.	'98	Mt. Auburn, Cincinnati, Ohio.
LINDSLEY, FREDERICK CLELAND, 4.B.I		'00	1625 Conn. Ave., Wash'gt'n, D.C.
LINGLEY, ROBERT ROSS	II.	'00	28 Ash St., Cambridge, Mass.
LITCHMAN, HAROLD BARTLETT	III.	'00	Marblehead, Mass.
LITTLE, EDMUND COOK	IV.	'98	77 Mansur St., Lowell, Mass.
LITTLEFIELD, HOMER	VI.	'00	1813 3d Ave., West Troy, N. Y.
LOCKE, HARRIET FRANCES	S.		Nashua, N. H.
LOHBILLER, HARRY JOHN	II.	'00	21 Cranston St., Jamaica Plain.
LOMBARD, ALFRED WALDO	11.	'o8	Wayland, Mass.
LOMBARD, PERCIVAL HALL, A.B	VI.	'98	130 Newbury St., Boston, Mass.
Long, John William	VI.	'00	71 Moulton St., Charlesto'n, Mass.
Long, Margaret, A.B	S.		Hingham, Mass.
Long, Zourie H	XIII.	'98	36 N. Franklin St., Wilkesbarre.
LOOMIS, HENRY MEECH	V.	'97	Yokohama, Japan.
LORD, CHARLES EDWARD	VI.	'98	63 Col'bus Ave., Somerville, Mass.
LORD, HERBERT IVORY, X	V.	'98	75 Howard Ave., Roxbury, Mass.
LORING, CONRAD	II.	'98	Kobe, Japan.
LOUD, RALPH WHITE	S.	90	Weymouth, Mass.
LOVEJOY, WALTER LIVINGSTON	III.	'98	109 Manner St., Buffalo, N. Y.
LOVELAND. BENJAMIN ALPHEUS	I.	'97	Chatham, Mass.
LUMBERT, RUTHERFORD VIPOND	I.	'00	Newton Lower Falls, Mass.
LUNT, ROBERT SOMERBY	X.	'97	19 Pawn St., Newburyport, Mass.
LUYTIES, OTTO GERHARD	VI.	'00	328 E. 15th St., New York, N. Y.
LYNCH, GEORGE EDWARD	11.	'99	48 Lincoln St., Hyde Park, Mass.
MABIE, HARRY SAXTON, B.P	S.	16	41 Brown Ave., Roslindale, Mass.
MACBRIDE, JAMIE DOUGLAS	XIII.	'99	Arlington Heights, Mass.
MACFARLANE, DAVID HURON	S.	.,,	85 Church Hill Ave., M'treal, Que.
Mack, Harrington, Σ. A. E	S.		Fort Mirr, S. C.
MACKEEN, ISAAC ABNER	1.	'00	Peabody, Mass.
MACKOON, FREDERIC HALL	VI.	'00	12 State St., Auburn, N. Y.
Madero, Salvador	S.		Parras-Coahuila, Mexico.
MAGEE, GUY, JR., Σ. X	1	'99	526 Cornelia Ave., Chicago, Ill.
Magee, John, 2D	II.	'99	Wenham Depot, Mass.
MAGUE, FRANCIS JOSEPH	11/24	'00	West Newton, Mass.
MAGUIRE, JOSEPH TRAVERS		'00	8 Beale St., Dorchester, Mass.
MAGUIRE, THOMAS FRANCIS JAMES .	VI.	'97	8 Beale St., Dorchester, Mass.
MAHONEY, JOSEPH MICHAEL	VI.	'97	21 Bailey St., Dorchester, Mass.
MANLEY, SUMNER MARSHALL	II.	'00	238 Liberty St., Brockton, Mass.
Manning, Alice Lee		2.5.70	Milton, Mass.
Mansfield, Frank Erastus	1.	'98	26 Cumberland St., Boston, Mass.
Manson, Edmund Sewall, Jr		'97	7 Holliday St., Dorchester, Mass.
MARSHALL, HERMAN WESTON	VII.	'97	114 Highland St., Brockton, Mass.
MARSHALL, WILLIAM ADAMSON		'98	Summit Ave., Brookline, Mass.
STATE OF THE PARTY		11.	ALL THE TAXABLE PROPERTY.

NAME AND FRATERNITY.	COURSE.	CLAS	S. HOME ADDRESS.
Mason, Earl Potter	. П.		
Mathews, George Eugene		97	Halidir Hall, Newport, R. I.
MAXFIELD, DANIEL ELLWOOD		'00	1624 E. Third St., Dayton, Ohio. Amesbury, Mass.
MAYER, DURAND		'98	144 Madison Ave., New York City.
MAYHEW, HAROLD BAKER	. I.		
McCarthy, George Herbert .		'00	West Tisbury, Mass.
4 L L T L H M G H M M H M H M M M M M H M M M M M	. IX.	97	W. Fuller St., Dorchester, Mass.
		'98	516 Warren St., Roxbury, Mass.
	. II.	97	Normal, Ill.
McCrudden, Francis Henry		'00	134 Castle St., Boston, Mass.
McDonald, Charles Snead		'99	Louisville, Ky.
McDonald, James George		'00	4 Highland Park, Roxbury, Mass.
McGowan, Francis Xavier		'00	14 Berkeley St., Lawrence, Mass.
McIntosh, James William		'00	60 Sheridan St., Jamaica Plain.
McIntyre, James Sherwood		'98	69 Willis St., New Bedford, Mass.
McIver, Jean Bond, B.S		1.0	158 Beacon St., Worcester, Mass.
McJunkin, Paul		'98	62 Sherman St., Roxbury, Mass.
McKell, William, Ph.B , X. Φ .		'98	Chillicothe, Ohio.
에 하면데 [10] [10] [10] [10] [10] [10] [10] [10]	. X.	97	Petrolia, Ont.
McMaster, Herbert Milton	. VI.	'co	Portland, Oregon.
McPherson, Herbert Austin .		'00	6 Garden St., Medford, Mass.
	. IV.	'99	217 W. 7th St., Erie, Pa.
Melcher, Arthur Clarke		'00	Newton Centre, Mass.
MERRIAM, CHARLES ALLEN		'00	163 Ashley Ave., Char'ston, S. C.
MERRICK, CHARLES IRVING, A.B.			Holyoke, Mass.
MERRICK, FREDERIC ICKES, X. Φ		'00	1435 3d Ave., New Brighton, Pa.
MERRILL, ALBERT SIDNEY	. X.	00	11 Florence St., Malden, Mass.
MILLER, LEWIS ARTHUR		00	North Easton, Mass.
MILLER, STUART BERWICK		'00	122 Hancock St., Camb'dge, Mass.
MILLIKEN, CARL SPENCER		99	414 Salem St., Malden, Mass.
MILLIKEN, SUMNER MOULTON	. I.	'98	14 School St., Saco, Me.
MILLS, HELEN CURTIS	. S.		Sharon, Mass.
MILLS, PRESCOTT CALDWELL		'98	Arlington, Mass.
MINARY, THOMAS HELM		'00	1054 2d St., Louisville, Ky.
MINNIG, FRANK RAYMOND, A. T. Ω.		'98	615 Centre Ave., Reading, Pa.
Moebs, Joseph Julius		'98	235 Magnolia St., Dorchester.
Möller, Albert Voltaire, Δ. K. E		'00	Galveston, Texas.
MQMMERS, RICHARD, X. Φ		'98	South Manchester, Conn.
Moody, George Barrell		'00	214 Broadway, Bangor, Me.
Moore, Clarence Alfred		'99	Arlington, Mass.
MORAN, GEORGE AUSTIN		97	So. Framingham, Mass.
Morgan, Carl Leon, Σ. A. E	. VI.	'98	100 Mt. Vernon, Fitchburg, Mass.
Morgan, Harold Loomis	. VI.	'00	7 Lincoln St., Springfield, Mass.
MORK, HARRY SOLOMON	. V.	'99	19 Waumbeck St., Roxbury, Mass.
Morrill, Edward Francis	. VI.	'98	80 Snow St., Fitchburg, Mass.
Morris, Henry Curtis	. III.	'00	Hotel Mannett, Evanston, Ill.
Morris, William Longfellow .	. VI.	'99	1309 Kenesaw Ave., Wash'n, D. C.
	. II.	'99	Canton, Mass.
Morse, Harry Leonard	. IIVI.	'99	8 Ashford St., Allston, Mass.
Morse, Henry Grant, Jr., $\Delta$ . $\Psi$ .	. IV.	'99	800 Delaware Av., Wilm'ton, Del.

NAME AND PRATERNITY.	COURSE.	CLASS	, HOME ADDRESS,
		'00	Webster, Mass.
MORTON, CHARLES EDWARD, Σ. A. E.			1553 Madison Av., Covington, Ky.
Moter, Edward Ramond	11.	97	1553 Madison Av., Covington, Ky.
MOTCH, STANLEY	VI.	99	911 Boylston St., Boston, Mass.
Moulton, Walter Augustus	7	'00	16 Beach St., Dorchester, Mass.
			9 Laurel St., Dorchester, Mass.
MULHALL, HAROLD TOREY		'97	42 N. Main St., Natick, Mass
Muhlig, James Fred		'98	2 Akron Pl., Roxbury, Mass.
MURRAY, PARNELL SIDWAY		lan	Virginia Hotel, Kansas City, Mo.
NATHAN, ALBERT FRANKLIN, JR		'99	
NEALL, NEWITT JACKSON		00	Altoona, Pa.
Nebel, Herreros Alejandro, B.S.	S.	'98	Santiago, Chile.
NEIDICH, SAMUEL A., PH.B.		'98	12 W. High St., Carlisle, Pa.
Nelson, Alexander Howard, A.B.	S.	2.0	Chambersburgh, Pa.
NELSON, WILLIAM BUNDY		'98	14 Boyls'n Terrace, Jamaica Plain.
NESMITH, THOMAS, JR., Δ. T. Δ.		'00	2 Park St., Lowell, Mass.
NEWBURY, GEORGE KELLOGG		'98	125 W.Franklin St., Jackson, Mich.
Newell, Lester Allen	III.	'99	Southbridge, Mass.
Newell, William Stark	XIII.	'99	65 Church St., Winchester, Mass.
Newhall, Charles Alexander .	. S.		25 Wales St., Dorchester, Mass.
NEWHALL, HENRY BORDEN, Φ. B. E.		'98	150 E. 7th St., Plainfield, N. J.
NICKERSON, CLARENDON		'97	16 Courtland St., B'dgeport, Conn.
Noble, Howard Agnew, X. φ		'97	5716 Howe St., Pittsburg, Pa.
NOLTE, JULIUS	. II.	'98	803 Centre St., Jamaica Pl., Mass.
	. V.	'97	760 Mass. Ave., Cambridgeport.
Norris, Grace Adelaide	S.		129 Chestnut St., Chelsea, Mass.
NORTH, EDWARD	. III.		Edgehill Road, Brookline, Mass.
NORTON, CLIFFORD	. II.		6 Mansfield St., Everett, Mass.
Noyes, Harriet Niles	. S.		Mattoon, Ill.
OBER, PAUL JOSEPH	. VII.		748 Tremont St., Boston, Mass.
O'CONNELL, CATHERINE	. S.		79 Chapman, Charlestown, Mass.
	. IV.		751 7th St., Buffalo, N. Y.
O'HERN, TIMOTHY CYRIL	. X.	1000000	43 Cedar St., N. Camb'dge, Mass.
O'LEARY, WILLIAM H. J., A.M.			Richibucto, N. B.
OLIN, EDWIN READ			29 St. James St., Roxbury, Mass.
OLIVER, MARSHALL F., A.B., A. T. A			Annapolis, Md.
Oppenheim, Robert Emmet	. II.		24 E. 46th St., New York, N. Y.
Orr, Hugh	. IV.		207 Court St., Brockton, Mass.
Osgood, Edwin Putnam			200 W. Br'kline St., Boston, Mass.
Ośgood, Harry Edmund	. II.		272 Irving Ave., Chicago, Ill.
Osgood, Henry Douglas	. XI.	'98	200 W. Br'kline St., Boston, Mass.
OSGOOD, ISAAC	. II.	'00	North Andover, Mass.
Oxnard, Horace Whitcomb	. I.	'00	Norway, Me.
PACKARD, ALPHEUS APPLETON	. III.		275 Angeel St., Providence, R. I.
PACKARD, EDWIN AUGUSTUS	. II.	'99	Mansfield, Mass.
PAKARD, LEONARD WARREN	. VI.	'98	229 Bay St., Taunton, Mass.
PAGE, CHARLES BARNARD	. XIII.	'99	259 Wash'n St., Dorchester, Mass.
PAGE, WALTER, Δ. Ψ	. XIII.	'97	253 Beacon St., Boston, Mass.
PAGET, JOHN WALLACE	. II.		11 Beale St., Dorchester, Mass.
PAIGE, ELLWOOD BRYANT	. IV.	'98	50 Chatham St., Lynn, Mass.

NAME AND FRATERNITY.	COURSE,	CLASS	s, HOME ADDRESS,
PAINE, CHARLES BODWELL, Y. X	IV.	'97	76 State St., Augusta, Me.
PALMER, WORTHINGTON, A. K. E	IV.	'99	272 State St., Albany, N. Y.
PARKER, WILLIAM EDWARD	1.	'99	Newtonville, Mass.
PARKER, WILL ROGERS	VI.	'98	109 Islington St., Portsm'th, N. H.
PARKER, WILLIAM T., JR., Δ. Ψ	IX.	'97	Crescent Hill, Springfield, Mass.
PARSONS, WILLIS EVERETT	S.	'97	32 Middle St., Gloucester, Mass.
PARSONS, ARCHIBALD LIVINGSTONE	I.	'97	Derry, N. H.
PATCH, JAMES ALFRED	X.	'99	Stoneham, Mass.
PAUL, CHARLES EDWARD		'00	36 High St., Belfast, Me.
PEASE, CHARLES HENRY	II.	'98	Marlboro, N. H.
PEAVEY, LEROY DEERING	I.	'98	Exeter, N. H.
PECHIN, JOHN SHELLEY, Σ. X	II.	'97	587 Prospect St., Cleveland, Ohio.
PECK, ARTHUR STEARNS	III.	'00	Wellington, Mass.
PEIRCE, VERNON MARSHALL	I.		169 W. Newton St., Boston, Mass.
PENARD, THOMAS EDWARD	VI.	'00	Paramaribo, D. G.
PENDELL, CHARLES WILLIAM	VI.	'98	Cleburne, Texas.
PENNOCK, GEORGE ALGER	II.	'99	Weston, Mass.
PERKINS, GEORGE HAWTHORNE	II.	'99	18 Brown St., Salem, Mass.
PERKINS, JOHN McCLARY, JR	VI.	'00	Arlington Heights, Mass.
PERLEY, WILLIAM MARSHALL	v.	'98	74 Riverside Ave., Medford, Mass.
PERRY, FRANK BRIDGHAM	II.	'98	60 Laurel Hill Av., Norwich, Conn.
PETTEE, CHARLES LESLIE WIGHT .		'97	Newtonville, Mass.
PHALEN, WILLIAM CLIFTON	v.	'99	13 Sadler St., Gloucester, Mass.
PHELPS, EARLE BERNARD	V.	'99	New Brunswick, N. J.
PHILBRICK, SHIRLEY SEAVEY	II.	'98	Rye Beach, N. H.
PHOENIX, AMY ELIZABETH	S.	,	45 Concord Sq., Boston, Mass.
PIERCE, EDWARD EVERETT	XIII.	'99	70 Cedar St., Malden, Mass.
PIGEON, WILLIAM GARDNER	IV.	'00	139 Trenton St., E. Boston, Mass.
PIGMAN, GEORGE WOOD, JR	VI.	'00	Washington, D. C.
PIKE, OTTO SAMUEL	II.	'97	2 Park Pl., Malden, Mass.
PINKHAM, RALPH HOWARD	I.	'99	175 Amory St., Roxbury, Mass.
PITCHER, EDMUND HENRY	II.	'00	Keene, N. H.
Plumb, Ralph, D. V	II.	'00	267 Linwood Ave., Buffalo, N. Y.
PLUMMER, HOWARD CLARK	III.	'00	Milton, Mass.
PORTER, ARTHUR FELIX	V.	'98	16 Neponset Ave., Hyde Park.
PORTER, JOHN LEWIS	VI.	'00	15 Quincy St., North Adams, Mass.
PORTER, RUSSELL WILLIAMS	S.		Springfield, Vt.
PORTNER, ROBERT FRANCIS	VI.	'98	1104 Vermont Ave., Washington.
POTTER, MYRON PRESCOTT	I.	'00	7 Holly St., Salem, Mass.
POTTER, SARAH EMELINE		-	Acworth, N. H.
POTTER, WILLIAM CHAPMAN, A. K. E.		'97	4832 Madison Ave., Chicago, Ill.
Potts, Louis Joseph, A.B	VI.	'99	Navy Yard, Charlestown, Mass.
PRATT, GILBERT HOMER	V.	'97	39 Hancock St., Chelsea, Mass.
PRATT, ROBERT WINTHROP, JR	I.	'98	Waban, Mass.
PRAY, DUDLEY MALCOLM	I.	'99	508 Broadway, South Boston, Mass.
PRICE, WILLIARD ATHERTON	I.	'99	1370 Race St., Denver, Col.
PRIEST, BENSON BULKELEY	I.	'98	Littleton, Mass.
PRIEST, GEORGE HEYWOOD	X.	'99	56 Prospect St., Waltham, Mass.
PRIEST, RUSSELL PARKER		'00	33 Cedar St., Malden, Mass.
THE PARTY OF THE P		-	33 Count Oct, maiden, mass.

NAME AND PRATERNITY.	COURSE.	CLAS	s. HOME ADDRESS,
PRIEST, WARREN ALBERT	v.	'99	100 Homestead St., Roxbury.
PRIME, HAROLD AUGUSTUS	VI.	'98	434 Washington St., Brighton.
PROCTOR, ALFRED WATERS	VI.	'99	219 W. Springfield St., Boston.
PROCTOR, CHARLES FREDERIC	S.		247 W. Newton St., Boston, Mass.
PROSSER, REAY COOPER	IV.	'98	St. Louis, Mo.
Pugh, Achilles Henry		'97	Madison Pike, Cincinnati, Ohio.
PUTNAM, WM. EDWARD, JR., A.B		'oS	Clark Road, Brookline, Mass.
RABBETH, WALTER ESMOND		'00	67 Crawford St., Roxbury, Mass.
RAND, NATHANIEL DWIGHT	1000	'00	Watertown, Mass.
RAPP, WALTER LOUIS, A. Y		'00	1339 Chapel St., Cincinnati, Ohio.
REAL Y GAILLARD JUAN, A.B.		'99	Santiago de Cuba.
REARDON, THOMAS FRED. EUGENE		'00	Wellesley, Mass.
REDMAN, ARTILLE		'00	Belfast, Me.
REED, WILLIAM EDGAR		'97	4609 Centre Ave., Pittsburg, Pa.
REGESTEIN, ERNEST ALBRECHT	9022	'99	92 Wyman St., Jamaica Plain.
REIMER, ARTHUR ADAMS		'00	28 N. Maple Ave., E. Orange, N. J.
REMINGTON, WOLCOTT		'00	Windsor, Conn.
RENSHAW, CLARENCE		'99	1910 Park Ave., Baltimore, Md.
RICH, LAMONT		"	85 W. Main St., N. Adams, Mass.
RICHARDS, LOUIS JEROME, A. K. E.		'97	269 Broadway, Norwich, Conn.
RICHARDSON, CHESTER AUGUSTUS	. I.	'00	Pelham, N. H.
RICHARDSON, CLINTON LEROY		'00	Winchester, Mass.
RICHARDSON, EDWARD BRIDGE, Δ. Ψ		'98	155 Beacon St., Boston, Mass.
RICHARDSON, FRANK LINDEN		9-	Concord, Mass.
RICHARDSON, JAMES HERBERT	. I.	'99	Newtonville, Mass.
RICHARDSON, MAURICE FREDERIC		'99	East Providence, R. I.
RICHARDSON, PHILIP, A.B		99	Cottage St., Brookline, Mass.
RICHARDSON, I HILLIP, A.B		199	30 King St., Worcester, Mass.
RICHMOND, HENRY PARSONS		'98	East Providence, R. I.
	IV.	'99	Clinton Road, Brookline, Mass.
	V.	'99	70 Wyoming Ave., Malden, Mass.
	IV.	'99	2535 Indiana Ave., Chicago, Ill.
	XIII.	'99	2535 Indiana Ave., Chicago, Ill.
RIKER, GEORGE HAYES	. X.	199	Belmont St., Somerville, Mass.
RILEY, JOSEPH CAINS, JR	II.	'98	Allen St., Roslindale, Mass.
	. S.	90	Newton Highlands, Mass.
ROBERTS, ROBERT PARKER	III.	'00	42 Quincy St., Roxbury, Mass.
ROBERTSON, SAMUEL BROWN	. I.		East Milton, Mass.
ROBINSON, ARGYLE E., A. K. E.	. IV.		5406 Jefferson Ave., Chicago, Ill.
	. VI.		Reading, Mass.
	IV.	2.0	518 W. Main St., Louisville, Ky.
Robinson, George Avery, Δ. Ψ			33 Child St., Hyde Park, Mass.
ROBINSON, JOHN TILDEN, JR	***	0.000	181 Margaret St., Plattsb'gh, N.Y.
ROBINSON, LAFOREST GEORGE			3129 Page St., Philadelphia, Pa.
ROBINSON, THOS. PENDLETON, 4. B. E.			84 Hawthorne St., New Bedford.
ROBINSON, WILLIAM ATTMORE, JR.		-	
Robson, Edward Riggs	. I.	-	Wellesley Hills, Mass. Mansfield, Mass.
ROGERSON, JOHN RUSSELL		~ *	
ROLFE, HENRY PETTINGELL.	. S.		27 High St., Newburyport, Mass.
Rood, Norman Paul	. 1V.	'99	Madisonville, Ohio,

NAME AND FRATERNITY.	COURSE,	CLAS	S. HOME ADDRESS.
ROOKE, WARREN AUGUSTUS	IV.	'97	8t Crown St., Meriden, Conn.
Ross, Sidney Fuller	IV.	'00	Kennebunk, Me.
ROSSMASSLER, RICHARD CARL	XIII.	'00	Mill & Cedar Sts., Germant'n, Pa.
ROYCE, JAMES CHARLES	II.	'97	Davenport, Ontario.
RUMERY, RALPH ROLLINS, O. E	S.	24	380 Danforth St., Portland, Me.
Russ, Ernest Frank	IX.	'98	193 W. Brookline St., Boston.
RUSSELL, BENJAMIN F. W	IV.	'98	Concord Junction, Mass.
RUSSELL, EDWARD FRANCIS	II.	'99	650 Middlesex St., Lowell, Mass.
RUSSELL, GEORGE EDMOND	I.	'00	85 Montvale Ave., Woburn, Mass.
RUSSELL, WALTER BASFORD	II.	'97	4 Paulding St., Roxbury, Mass.
RUTHERFORD, EUGENE WHITE	S.		231 Jefferson Av., Brooklyn, N. Y.
RYAN, IDA ANNAH	S.		19 Hammond St., Waltham, Mass.
SAMUELS, EDWIN FRANCIS	II.	'99	21 Austin St., Hyde Park, Mass.
SANCHEZ Y BATISTA, PEDRO, O. E	II.	'99	Nuevitas, Cuba.
SANDERS, WARREN WILLARD	V.	'00	West Gardner, Mass.
SARGENT, ALBERT ELLWOOD	S.		Belmont, Mass.
SARGENT, HOMER EARLE, JR., Ph.B.	VI.	'98	Lexington Hotel, Chicago, Ill.
SAUNDERS, WILLIAM COLEGROVE	II.	'00	67 Peter Parley St., Jamaica Plain.
SAWIN, LUTHER ROBINSON	V.	'97	34 Robbins St., Waltham, Mass.
SAWTELLE, HARRY FRANCIS	I.	'97	12 Magazine St., Cambridgeport.
SAWTELLE, WILLIAM OTIS, A. K. E	VIII.	'97	50 Penobscot St., Bangor, Me.
SAWYER, HAVEN, A. K. E	II.	'99	64 Forest Ave., Bangor, Me.
SAWYER, HORACE RUSSELL	II.	'99	Rye Beach, N. H.
SAWYER, RALPH EDMUND, O. B. E	S.		196 Walnut Ave., Roxbury, Mass.
SCHLEGELMILCH, LEO WILLIAM, JR	III.	'00	32 Mt. Pleasant Ave., Roxbury.
SCHLESINGER, HELEN	S.		Brookline, Mass,
SCHMIDT, ALBERT GEORGE ANTON .	II.	'00	1537 Oakdale Ave., Chicago, Ill.
SCHMIDT, HERMAN HENRY	S.		Melville, N. Y.
SCHNELLER, GEORGE OTTO, X. O	II.	'00	103 S. Cliff St., Antonio, Conn.
SCHROEDER, ERNEST HERMAN	IV.	'98	1608 South St., Omaha, Neb.
SCHUTTLER, CARL, X	II.	'97	287 W. Adams St., Chicago, Ill.
Schwartz, David	V.	'97	10 Wall St., Boston, Mass.
SCOTT, BEN EMBRY	VI.	'00	1010 Louisiana St., Lit. Rock, Ark.
SCOTT, HENRY FRANCIS	II.	'98	38 Prospect St., Brockton, Mass.
SCOTT, WALTER	II.	'00	25 Bradford St., Lawrence, Mass.
SCUDDER, HAYWARD, B.A	S.		21 E. 22d St., New York City.
SEARLE, LEWEN FIRTH	I.	'00	83 May St., Lawrence, Mass.
SEARS, JOSEPH HOMER	V.	'98	East Dennis, Mass.
SEARS, STANLEY COLLAMORE	III.	'00	Winthrop, Mass.
SEAVER, HENRY MORSE	S.		Bellevue St., West Roxbury, Mass.
SEAVER, KENNETH	I.	'00	Woodstock, Vt.
SEAVEY, NORMAN EMERY	VI.	'99	Dover, N. H.
SEIDENSTICKER, LEWIS JEROME	V.	'98	95½ Inman St., Cambridge, Mass.
SELLEW, WILLIAM HAMILTON	II.	'97	608 Forest Ave., Avondale, Ohio.
SHAPLEY, HARRY TILTON	X.	'00	32 Orchard St., Leominster, Mass.
SHAW, ALBION WALKER	VI.	'98	25 Pierce St., Malden, Mass.
SHAW, BRACKLEY AZEL	IX.	'00	Englewood Ave., Brighton, Mass.
Sheak, Edwin Ruthven, $\theta$ , $\Xi$	IX.	'99	Reading, Mass.
SHEDD, ALBERT RIX	11.	'98	Silver Creek, N. Y.
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NAME AND FRATERNITY.	COURSE.		
SHERMAN, CHARLES EDWIN, A. Y.	. IV.	'00	46 Granite St., Westerly, R. I.
SHERMAN, EDWARD CLAYTON	Ι.	'98	35 Langdon St., Cambridge, Mass.
SHERMAN, HENRY ARTHUR	. III.	'97	470 Massachusetts Ave., Boston.
SHERRILL, MILES STANDISH	. V.	'99	301 E. Cottage St., Louisville, Ky.
SHUMAKER, LOUIS WILLIAM	. VI.	'99	Ortonville, Minn.
SHUMAN, JESSE WYMAN, Δ. T. Δ		'97	1401 Chicago Ave., Minneapolis.
SIBLEY, EDWARD WARREN	. II.	'99	Weston, Mass.
SICKMAN, JAMES FRANCIS, Σ. X.		'98	215 Oak St., Holyoke, Mass.
SILVERMAN, MORTIMER	. VI.	'00	172 Locust St., Allegheny, Pa.
SITES, FREDERICK ROBERT	I.	'99	491 Carleton St., Newton, Mass.
SKINNER, CHARLES JERNEGAN	Ι.	'98	Ottawa, Kansas.
SKINNER, HERVEY JUDSON	. V.	'99	Wakefield, Mass.
SLAVENS, JOHN HEBER	. III.	'98	334BaltimoreAv.,KansasCity,Mo.
SLOCUM, WILLIAM WHITAKER	. I	'99	East Providence, R. I.
SMITH, CHARLES ALFRED	I.	'99	Reading, Mass.
SMITH, CHARLES EDWARD	I.	'99	261 Wash'ton, Somerville, Mass.
SMITH, CHARLES FRANKLIN, Σ. A. E.	XI.	'98	1512 R St., N. W. Wash'ton, D. C.
SMITH, CHARLES HENRY	II.	'98	107 Warren St., Charlestown, Mass.
SMITH, GEORGE LAWRENCE, A.B	IV.	'98	64 Sparks St., Cambridge, Mass.
SMITH, GODFREY LEWIS	. XIII.	'98	1 Elmwood St., Roxbury, Mass.
SMITH, GRANVILLE. A. Y	XIII.	'98	2137 L St., N. W. Wash'ton, D. C.
SMITH, HARRISON W., A.B., A. Y.	VI-II.	'97	40 Mill St., Dorchester, Mass.
SMITH, HARRY AUSTIN	II.		Wakefield, Mass.
SMITH, HERBERT EDWARDS, S. B	. S.		19 Liberty St., Gloucester, Mass.
SMITH, HORACE TILDEN	V.	'98	East Bridgewater, Mass.
SMITH, JAMES WILFRED	XIII.	'97	85 Concord St., Lawrence, Mass.
SMITH, MONTFORT HILL, A. T. A	IV.	'99	Falmouth.
SMITH, OREN BARRON, JR	III.	'97	55 Massasoit, Northampton, Mass.
SMITH, PERCY MERRIHEW	II.	'97	Rockland, Mass.
SMITH, SUMNER IVES	VI.	'00	107 3d St., Elkhart, Ind.
SMITH, THEODORE BROOKS	VI.	'98	39 Hawth'ne Av., Cleveland, Ohio.
SMITH, WILLIAM FRANKLIN	. II.	'97	3 White St., N. Cambridge, Mass.
SMITH, WILLIAM GRAVES	I.	'97	Mansfield, Mass.
SMITH, WILLIAM HENRY	II.		1823 14th Ave., Altoona, Pa.
SMITHWICK, HAROLD	11.	'99	New Castle, Me.
SMYSER, ALBERT ERNEST, S.B	S.	100	6 Wellington Terrace, Brookline.
SMYSER, JAMES SWETT, S.B., A. K. E.	S.		6 Wellington Terrace, Brookline.
SNOW, FRANK WHIPPLE	- 14		21 Charter St., Newburyp'rt, Mass.
Snow, Frederick Willis	VII.	'99	565 Essex St., Lynn, Mass.
Sohier, Louis Amory		'99	Concord, Mass.
Soule, Horace Webster	**	'99	22 Loring St., Somerville, Mass.
Soule, Lawrence Clement	X.	'99	Newtonville, Mass.
Southworth, Frederic Willard .	***	'00	W. Stoughton, Mass.
SPAULDING, FRANK ALGER	I.	'98	West Stockbridge, Mass.
SPEAR, WALTER EVANS	XI.	'97	53 Camb'dge St., Lawrence, Mass.
SPERRY, MARCY LEAVENWORTH	I.	'00	Navy Yard, New York, N. Y.
Spiess, Arthur Douglas	IV.	'97	2 E. 15th St., New York, N. Y.
SPRAGUE, JAMES PADDOCK	IV.	'00	1804 Summit St., Kansas City, Mo.
Spring, Russell Clark	IV.	'97	Newton Lower Falls, Mass.
O'RINO, RUSSELL CLARK 1 1 1 1 1		91	Trouton Doner Lane, Mass.
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NAME AND FRATERNITY.	COURSE.	CLASS	
Springer, Ernest Roger	VI.	'98	67 Arlington St., Newton, Mass.
STAPLES, WILLIAM DEERING, Σ. A. E.	VI.	'98	645-A Congress St., Portland, Me.
STARBUCK, GEORGE FRANKLIN	II.	'97	43 Lexington St., Waltham.
STARK, HELEN GERTRUDE	S.		Navy Yard, Charlestown, Mass.
STARR, HERBERT HARRIS	I.	'99	16 Richards St., New London, Ct.
STEARNS, FREDERIC BALDWIN	IV.	'99	641 Wash'ton St., Brookline, Mass.
STEARNS, HERBERT RICHARDSON	I.	'00	108 Cushing Ave., D., Mass.
STEBBINS, CHARLES BOWLES	XIII.	'97	30 Day St., W. Somerville, Mass.
Stebbins, Rowland Williams, $\Delta$ . $\Psi$ .	VI.	'99	Crescent Hill, Springfield, Mass.
STEFFENS, WILLIAM FREDERICK	I.	'98	137 W. Concord St., Boston, Mass.
STEIDEMANN, THEODORE WILLIAM .	IV.	'00	4110 N. 11th St., St. Louis, Mo.
STRINER, KLAUS JUNIOR	III.	'97	58 Washington St., Allegheny, Pa.
STETSON, JAMES ALEXANDER, Y. A. E.	I.	'99	67 Bedford St., New Bedford, Mass.
STEVENS, GORHAM PHILLIPS	IV.	'98	26 Gray St., Cambridge, Mass.
STEVENS, RALPH	III.	'00	Whitman, Mass.
STEVENS, WILLIAM LEONARD	· III.	'00	74 Walnut St., Somerville, Mass.
STEVENS, WILLIAM WENTWORTH	IV.	'98	268 Summer St., Lynn, Mass.
Stewart, Lewis, $\Delta$ , $\Psi$	IV.	'00	208 W. State St., Trenton, N. J.
STILES, PERCY GOLDTHWAIT	VII.	'97	168 Walnut St., Newtonville, Mass.
STILLINGS, SAMUEL WARREN	IV.	'98	205 St. Botolph St., Boston, Mass.
STOCKTON, PHILIP, A.B	I.	'99	390 Beacon St., Boston.
STONE, JACOB, JR., A. Y	IV.	'99	3 Pond St., Newburyport, Mass.
STONE, WILLARD WILBERFORCE	I.	'00	12 Somerset Ave., Taunton, Mass.
STOUDER, JOHN BURTON, B.E	I.	'97	Gravity, Iowa.
STRATTON, CHARLES HEYWOOD	IV.	'00	Gardner, Mass.
STREET, GERALD BASIL, P. B. E	II.	'99	Highland Park, Ill.
STRENG, LEWIS STARR	VI.	'98	1656 Third Ave., Louisville.
STRICKLAND, WILLIAM R., A. Y	I.	'98	Philbrick Road, Brookline, Mass.
STRONG, MARY BAKER	S.		258 Beacon St., Boston, Mass.
STROUT, ROBERT WHEELOCK	II.	'00	22 Linden St., Salem, Mass.
STUART, HARVE REED	S.		Newark, N. Y.
STURTEVANT, EDWARD, O. Z	IX.	'98	77 Mommouth St., Brookline.
STURTEVANT, MARY	S.		77 Mommouth St., Brookline.
STUTCHKOFF, SAMUEL	II.	'99	1043 Washington St., Boston.
SUHR, CARL FREDERICK	II.	'00	77 Chester Ave., Chelsea, Mass.
SULLIVAN, HENRY HOWARD	II.	'98	98 Foster St., Brighton, Mass.
SUTER, RUSSELL	I.	'00	St. Louis, Mo.
SUTERMEISTER, EDWIN	v.	'99	Readville, Mass.
SUTLIFF, WALTER HANNEN	IV.	'99	161 Lancaster St., Albany, N. Y.
SWAN, CLIFFORD MELVILLE	V.	'99	91 Babcock St., Brookline, Mass.
SWASEY, ALBERT LORING, A. V	XIII.	'98	146 High St., Taunton, Mass.
Sweetser, Charles H., S. A. E	S.		27 Lawrence St., Wakefield, Mass.
SWIFT, CHARLES WILLISTON	II.	'98	Provincetown, Mass.
SWIFT, FRANK ROBINSON	X.	'99	575 Delaware Ave., Buffalo, N. Y.
Swinson, Johannah Charlotte	v.	,00	Wellesley, Mass.
TALLMADGE, THOMAS EDDY, Φ. B. E	VI.	'98	1631 Hinman Ave., Evanston, Ill.
TAPPAN, FREDERIC	VI.	'99	171 Newbury St., Boston, Mass.
TAYLOR, DENZIL HOLLIS	I.	'99	Peterboro, N. H.
TAYLOR, EDWARD MOLINEUX, O. B. E.	II.	'98	66 Garden St., Poughkeepsie, N.Y.
Zarlos, Donard Modifica, v. D. E.		90	or ourden out a oughweepsiert. It

NAME AND FRATERNITY,	COURSE.	CLAS	S HOME ADDRESS.
TAYLOR, JOHN	VI.	'97	294 Walnut St., Brookline, Mass.
TAYLOR, MARK ELLIOTT	VIII.	'98	47 Lincoln St., Hyde Park, Mass.
TEW, WILLIAM HENRY, Δ. K. E	II.	'98	418 Spring St., Jamestown, N. Y.
THANISCH, OTTO CONRAD	II.	'00	3305 Wash'n St., Jamaica Plain.
THAYER, HARRY MARTIN	V.	'00	34 Hunt St., Brockton, Mass.
THAYER, HORACE RICHMOND	I.	'98	Blackstone, Mass.
THOMPSON, MAURICE DE KAY, A. K. E.	VIII.	'98	508 Greenup St., Covington, Ky.
THOMSON, MARY JANE	V.	'97	224 W. Torsey St., Elizabeth, N. J.
THURBER, CLINTON DRAPER	I.	'00	592 Tremont St., Boston, Mass.
TIETIG, RUDOLPH	IV.	'98	419 Rockdale Ave., Cincinnati, O.
TIFFANY, GEORGE STANTON, Δ. Ψ	II.	'00	1705 Conn. Av., Washington, D.C.
TILTON, MARY AZUBA	S.		Concord, Mass.
TINKHAM, EDGAR LUTHER, B.P	VI.	'97	37 Courtland St., Providence, R. I.
TODD, THOMAS, JR	II.	'99	Concord, Mass.
TONE, JAY ERWIN	X.	'97	1427 Woodl'nd Av., Des Moines, Ia.
TORREY, CHARLES AUGUSTINE, JR	V.	'98	Lynnfield, Mass.
Tower, Samuel Francis, A.B	S.		English High School, Boston.
Tower, Walter Russell	II.	'00	Auburndale, Mass.
TOWNSEND, GEORGE RICHARDS, Δ. Υ.	XIII.	'99	287 Pearl St., New York City.
TRASK, EDGAR PIERCE	XIII.	'99	Peabody, Mass.
TREAT, GEORGE WINFIELD	I.	'98	Livermore Falls, Me.
TRUMBULL, MORRIS KINNARD, B. O. II.	I.	'97	4544 Oakenwald Ave., Chicago.
Tubbs, Henry Welles, X. Φ	IV.	'00	Kingston, Pa.
Tuck, Theodore Calvin	I.	'00	57 Portland St., Haverhill, Mass.
TUCKER, ALBERT WILLIAM	III.	'98	Summit Pl., Newburyport, Mass.
Tucker, Atherton Howe	IV.	'98	1079 Adams St., Dorchester, Mass.
Tucker, Frank Stevenson	S.		Marblehead, Mass.
Tucker, Fred Irving	II.	'00	222 Massachusetts Ave., Boston.
Tucker-Cornell, Idair	S.		22 Pleasant St., Salem, Mass.
TUDBURY, WARREN CHAMBERLAIN .	I.	'00	40 Warren St., Salem, Mass.
Tufts, John Lawrence	V.	'99	50 Woodbine St., Roxbury, Mass.
TURNER, LAWRIE HUMPHREY	V.	'99	39 Salem St., Medford, Mass.
Tweedy, George Augustus	III.	'00	Los Angeles, Cal.
TWOMBLY, FRED HENRY	IX.	'98	Newton Centre, Mass.
Tyler, Lucius Spaulding, Σ. X	VI.	'97	254 Linden St., Waltham, Mass.
Ulke, Darwin	VI.	'00	411 15th St., N. W. Wash'n, D. C.
Ulmer, George Frederick, X. φ	V.	'98	82 Cliff St., Norwich, Conn.
Underwood, Frank Edward	II.	'97	Auburndale, Mass.
Underwood, Howard Coggin	II.	'98	Natick, Mass.
Underwood, William Lyman	S.		Belmont, Mass.
USHER, SUSANNAH	S.		9 Kirkland Pl., Cambridge, Mass.
VALHKAMP, HENRY RUDOLPH	S.		2210 Miami St., St. Louis, Mo.
VIDETO, THEODORE ERNEST	IV.	'97	S. Framingham, Mass.
VINAL, RALPH SUMNER	IV.	'97	42 Warren Ave., Brockton, Mass.
VINING, ROBERT MCALLASTER	II.	'98	South Weymouth, Mass.
Vogel, Emil Frederick	I.	'00	40 Hartwell St., Roxbury, Mass.
VOGT, OSCAR GEORGE	IV.	'99	607 East St., N. W., Washington.
WADDELL, FRED CREELAN	I.	'99	Rockport, Mass.
WADLEIGH, GEORGE ROBINSON	II.	'97	Fountain St., West Newton, Mass.

NAME AND FRATERNITY.	COURSE.	CLAS	s. HOME ADDRESS.
WADSWORTH, GEORGE REED, Δ. Υ.		'98	29 Beaver St., Keene, N. H.
WALKER, CLARENCE HOWARD	II.	'99	Rumford, R. I.
WALLACE, ROBERT BRUCE, Δ. Υ		'98	120 Viaduct, Cleveland, Ohio.
Walls, John	S.		Lewisburg, Pa.
WALTERS, EDWARD PHILIP	V.	'99	42 Camp St., Providence, R. I.
WALTHER, WILLIAM JOHN	I.	97	929 N. Halsted St., Chicago, Ill.
WALTON, JAMES HENRY, JR	V.	'99	13 Coelin St., Newburyport, Mass.
WARD, WARD WELLINGTON, A. Y	IV.	'98	Wyandotte, Mich. 22 Pleasant St., Northboro, Mass.
WARREN, FRANK DINSMORE	II.	'98	Foxvale, Mass.
WASHBURN, THURLOW, A. K. E	III.	12000	31 Lee St., Cambridge, Mass.
WASTCOAT, RICHARD	I.	97	Taunton, Mass.
WATERSON, KARL WILLIAM	VI.	'98	31 Bellevue St., Lowell, Mass.
WATKINS, FREDERICK ARTHUR	VI.	'99	333 Rush St., Chicago, Ill.
WATROUS, CHARLES ALBERT, Ø. B. E.	IV.	'99	672 17th St., Des Moines.
WATTS, FRANCIS HENRY	I.	'97	Natick, Mass.
Weaver, Erasmus Morgan	S.	91	Fort Warren, Mass.
WEDLOCK, WILLIAM HENRY	I.	'99	4 Weldon St., Roxbury, Mass.
WEEDEN, WALTER LESLIE	II.	'00	14 S. 6th St., New Bedford, Mass.
WEEKS, IRVING CHAMBERS	IX.	'00	7 Holburn St., Roxbury, Mass.
WEEKS, MERLE	IV.	'99	1011 N. H. Ave., Washington.
WEIMER, EDGAR ARTHUR	II.	'98	Lebanon, Pa.
WELBOURN, EDWARD HAMBLETON .	II.	'00	1639 N.Colvert St., Baltimore, Md.
WELLS, WALTER WILEY	VI.	'99	Sackville, N. B.
WENTWORTH, JOHN FRANK	XIII.	'00	Rochester, N. H.
WERNER, FRANK ALBERT, Σ. X	XIII.	'99	530 W. Market St., Akron, Ohio.
Wessel, John Frederick, A.B	VI.	'98	436 N. Summer St., Nashville.
Wesson, Leonard	II.	'00	21 Rockville Park, Roxbury, Mass.
WESSON, PAUL BANCROFT	II.	'98	Tyngsboro, Mass.
WEST, WILLIAM EATON, Ф. B. E	V.	'99	24 RockinhamSt., Cambridgeport.
WESTCOTT, JENNIE SMITH	S.		171 Massachusetts Ave., Boston.
WEYMOUTH, THOMAS ROTE, Δ. Υ,	VI.	'97	56 W. Main St., Lock Haven, Pa.
WHITAKER, LEWIS ROSE	II.	'99	Parsons St., Brighton, Mass.
WHITE, ARTHUR BURR	X.	'00	West Newton, Mass.
WHITE, HARRY KEITH	IV.	'99	32 N. Main St., Brattleboro, Vt.
WHITE, WILLIAM	V.	'98	195 Cohannet St., Taunton, Mass.
WHITEHOUSE, MORRIS HOMANS	IV.		175 14th St., Portland, Ore.
WHITING, ELEANOR FELTON	S.		Trinity Court, Boston, Mass.
WHITMAN, NATHAN DAVIS	XI.	'00	455 Broadway, S. Boston, Mass.
WHITNEY, WALTER CUMMINGS	I.	'99	54 Jefferson St., Newton, Mass.
WHITON, DAVID THOMAS	II.	'97	Hingham Centre, Mass.
WHITTEN, ROSCOE BENJAMIN	IV.	'98	129 Brooks St., E. Boston, Mass.
WHITTEN, WILLIAM HENRY, JR., S.B.	S.		59 School St., Roxbury, Mass.
WIARD, EDWARD SAXON	S.		78 Chandler St., Boston, Mass.
WICKES, LEWIS WEBSTER	II.	'00	602 No. Ewing St., Helena, Mont.
WIGHTMAN, FRED	II.	'99	Oskaloosa, Iowa.
WIGNALL, LILY	S.		20 St. James Ave., Boston, Mass.
WILDER, CLIFTON WHITE	II.	'98	8 Gardner Pl., Leominster, Mass.
WILDER, RALPH EDWARD	I.	'98	3 Sunset Av., Jamaica Plain, Mass.

NAME AND FRATERNITY.	COURSE.	CLASS	HOME ADDRESS.
WILDER, WILLIAM ALPHONSO	VI.	'98	619 B. St., S. E. Washington, D.C.
WILLEY, NETTIE MORTON	S.		I Bower Park, Roxbury, Mass.
WILLEY, RAYMOND	V.	'00	Newtonville, Mass.
WILLIS, RAYMOND SMITH, P. B. E	S.		210 Davis St., Evanston, Ill.
WILSON, ALDA, B.C.E	S.		Harper, Iowa.
WILSON, ALICE VIRGINIA	V.	'00	Lenoir, N. C.
WILSON, ELMINA, C. E	S.		Harper, Iowa.
WING, CHARLES FREDERIC	VI.	'98	37 So. 6th St., New Bedford, Mass.
WING, DAVID LAFOREST, A. K. E	IX.	'98	76 Ohio St., Bangor, Me.
WING, IDA CEOLA STRATTON	S.		49 Boylston St., Jamaica Plain.
WINSLOW, CHARLES-EDWARD AMORY	VII.	'98	Hotel Oxford, Boston, Mass.
Winslow, George Carlos, Jr	VI.	'99	12 Yarmouth St., Boston, Mass.
WISE, HOWARD PARKER	I.	'00	139 Webster St., Malden, Mass.
WITHERBY, EDWIN C., S.B., A. $\Delta$ . $\Phi$ .	S.		5 Jackson St., Worcester, Mass.
WITHERELL, FREDERICK WHITEFIELD	II.	'co	11 Herrick St., Winchester, Mass.
WITHERELL, PERCY WARREN	VI.	'99	5 Devon St., Roxbury, Mass.
WOOD, FLORENCE ANNA	VIII.	'97	9 Bainbridge St., Roxbury, Mass.
WOOD, WILLARD LYMAN, JR	VI.	'99	Upton, Mass.
WOOD, WILLIAM REMINGTON	XIII.	'97	136 Broadway, Providence, R. I.
WOOD, WINTHROP BARRETT	I.	'98	Concord, Mass.
WOODMAN, ALPHEUS GRANT	v.	'97	Essex, Mass.
WOODMAN, GEORGE MADOCK	I.	'97	Essex, Mass.
WOODWARD, ALLAN HARVEY	III.	'00	Birmingham, Ala.
WOODWORTH, EDWARD HAROLD	V.	'97	Newtonville, Mass.
WOODYATT, ERNEST, Σ. X	IV.	'97	Evanston, Ill.
WOOLLETT, JOHN WOODWARD	I.	'99	Valmont, Col.
WORDEN, EDWIN SHELDON	II.	-'00	Newton, Mass.
WRIGHT, GEORGE HENRY	IX.	'98	104 Dartmouth St., Boston, Mass.
Wyzanski, Isaac	S.		9 Sheafe St., Boston.
ZIEGLER, PERCY ROLFE	11.	'00	I Ellis St., Roxbury, Mass.
ZIMMERMANN, WALTER, G. Σ. X	II.	'98	683 Sedgwick St., Chicago, Ill.
ZIRNGIEBEL, FRANCES	S.		61 Bower St., Roxbury, Mass.

### In Memoriam.

\*

PARKER REED McLAUTHLIN, '99. Died April 23, 1896.

WILLIAM MONTAGUE HALL, '98.
Died June 19, 1896.

CHARLES MAYO SWAN, '97. Died July 31, 1896.

JOSEPH CUSHING, '97. Died September 18, 1896.

SAMUEL HINKLEY ALLYNE, '98.
Died December 13, 1896.

# LOWELL SCHOOL



# pesion

NAME.						RESIDENCE,
ADAMS, LUCY MARY						Hyde Park, Mass.
ALGER, JOHN HERBERT						Reading, Mass.
ALLEN, WINTHROP BLAKESLEY					- 3	Newton, Mass.
BARNARD, WALTER MASON .						Granville, N. Y.
BARRETT, JESSIE GERTRUDE .						Malden, Mass.
BAXTER, CLARA V	1					Dorchester, Mass.
BEEBE, ADELAIDE SOPHIA .						Boston, Mass.
BLISS, NELLIE MAY						Quincy, Mass.
BUCKNAM, GRACE WINSLOW						. Roxbury, Mass.
CHAMBERLAIN, HARRIETTE LOUIS	SE .					Boston, Mass.
DANFORTH. HOMER WALLACE .						Woburn, Mass.
DAVIS, GRACE HAMMOND						Littleton, N. H.
DAW, MINNIE ELLA						Franklin, Mass.
DWYER, ELIZABETH LORETTA .			4			. Cambridgeport, Mass.
FALVEY, KARTARINE						Roxbury, Mass
FISKE, EDITH PORTER						. Cambridgeport, Mass.
FORD, HARRIET J						Duxbury, Mass.
GILLETTE, MARY LOUISE	1	1	32			Newton Highlands, Mass.
GOODRICH, GRACE ROSETTA .					4.	Dorchester, Mass.
GRAY, REUBEN FOREST			,			South Manchester, Conn.
GUELL, ALICE F						Boston, Mass.
HARVEY, ELVIRA TOPPAN				100	81	Newton Highlands, Mass.
HILL, HENRY BROOKS STEPHEN	*:					Roxbury, Mass.
HILTON, RENA EVELYN						Hyde Park, Mass.
HINES, EDWARD WALDRON .						. Danversport, Mass.
Hosmer, George Hammond .						Everett, Mass.
HUMPHREY, JANE MARION K						Boston, Mass.
JORDAN, CARLOTTA MAY						Boston, Mass.
KIDGER, LOTTIE HENSON					10	Everett, Mass.
LASKER, FLORENCE ERNESTINE	8.7					Boston, Mass.
McGrath, Benedict Vincent						Mattapan, Mass.
ORCUTT, LEON F						Hyde Park, Mass.

NAME.

#### RESIDENCE.

PALMER, ERNEST PACKARD							. South Boston, Mass.
PARKER, JAMES BURPEE .							. Newtonville, Mass.
PIKE, HELEN PACKARD .							Worcester, Mass.
Poor, Frederick Walton						-	Derry, N. H.
RICHARDSON, HELEN LOUISE					*		Roxbury, Mass.
SARGENT, ETHEL MARION .							Roxbury, Mass.
SHACKFORD, CHARLES LEE							. East Weymouth, Mass.
STANTON, WALTER F							Boston, Mass.
SYMONDS, ELIZA T							Hyde Park, Mass.
TAGGARD, HATTIE SOPHIA							Nashua, N. H.
THURESSON, MAUDE MAY .			-				. South Boston, Mass.
TILESTON, MILLIE HOUGHTON							Dorchester, Mass.
TRIPP, HERBERT LYMAN .							Middleboro, Mass.
WATERMAN, JAMES COPELAND							Hanover, Mass.
WHEELER, BESSIE BALDWIN							Dorchester, Mass.
WOOD, BEULAH LOCKE .							Roslindale, Mass.
WRIGHT, MYRA							Boston, Mass.
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#### FELLOWS.

#### Savage Fellowship.

Wendell, George Vincent, S.B., Massachusetts Institute of Technology.

#### Swett Fellowship.

BERRY, CHARLES WILLIAM, S.B., Massachusetts Institute of Technology.

#### CANDIDATES FOR ADVANCED DEGREES.

BIXBY, GEORGE LINDEN, S.B., Massachusetts Institute of Technology.
CUMMINGS, HENRY, JR., S.B., Massachusetts Institute of Technology.
Dodd, Margaret Eliot, S.B., Massachusetts Institute of Technology.
Henry, Ralph Coolidge, S.B., Massachusetts Institute of Technology.
Keith, Simeon Curtis, Jr., S.B., Massachusetts Institute of Technology.
Smith, Herbert Edwards, S.B., Massachusetts Institute of Technology.
Smyser, Albert Ernest, S.B., Massachusetts Institute of Technology.
Smyser, James Swett, S.B., Massachusetts Institute of Technology.
Whitten, William Henry, Jr., S.B., Massachusetts Institute of Technology.

#### OTHER GRADUATE STUDENTS.

Anderson, Robert, Ph.B., Yale University.

Andrews, George Frederick, A.M., Brown University.

Benson, Howard Jonathan, Ph.B., Colorado College.

Blossom, David Henry, A.B., Middlebury College.

Brown, Dickson Queen, A.B., Princeton University.

Brown, Warren Day, A.B., Amherst College.

Burr, Helen Louise, B.A., Wellesley College.

Chapman, James Finley, B.S., Carleton College.

Chase, Aurin Moody, B.S., Amherst College.

Chase, Wendell Wyse, B.C.E., Main State College.

Clark, Charles Bevan, A.B., Johns Hopkins University.

Cutler, Jane Ruth, A.B., Smith College.

Daniels, Nathan Hagar, Jr., S.B., Massachusetts Institute of Technology.

DARLINGTON, WILLIAM, M.E., Cornell University. DATER, PHILIP HERRICK, B.A., Williams College.
DEAVITT, HENRY McIntyre, B.S., University of Vermont. Dodge, Edwin Sherrill, A.B., Harvard University. DOTY, GEORGE FRANCIS, B.A., Throop Institute. ELSON, ARTHUR, A.B., Harvard University. FENNER, DAVID COLTON, Ph.B., Yale University. FERGUSON, FINLAY FORBES, A.B., B.S., Hampden-Sidney College. FIELD, LEONARD HAMILTON, A.B., Amherst College. FIFIELD, ETHEL FRANCES, A.B., Smith College. FITZ GERALD, JOHN WATSON, S.B., University of Michigan. FROTHINGHAM, BROOKS, A.B., Harvard University. GILMORE, JONATHAN MONROE, B.S., University of California, GODFREY, WILLIAM HOLLIS, Ph.B., Tufts College.
GREENMAN, BESSIE, B.A., Wellesley College.
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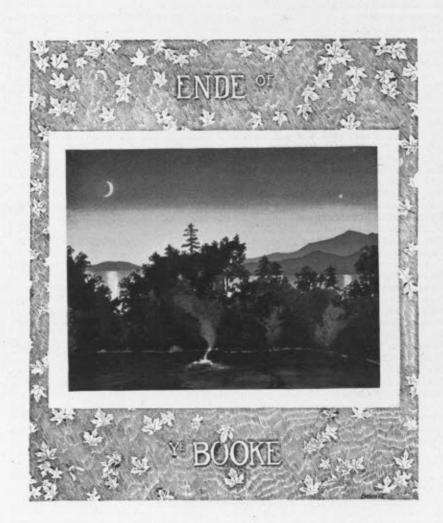
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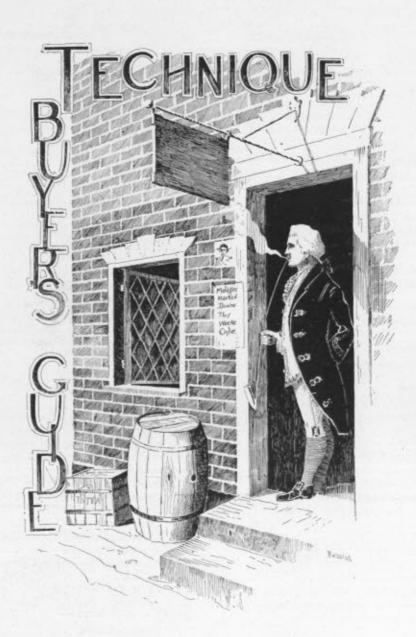
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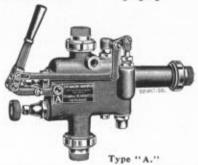
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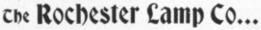
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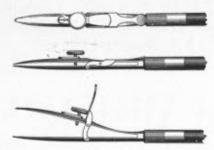
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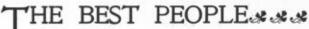
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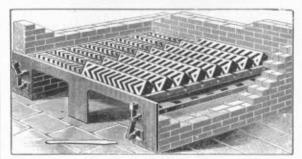
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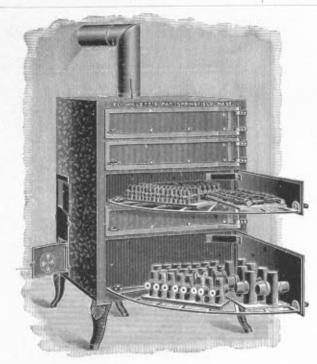
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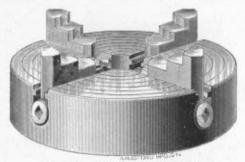


Fig. 27. Whiton Chuck Catalogue.

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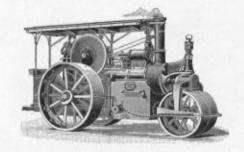
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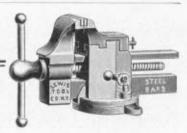
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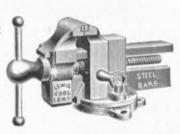
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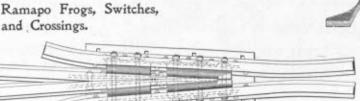
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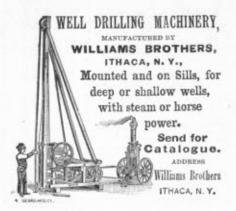


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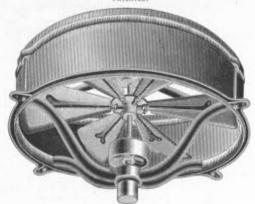
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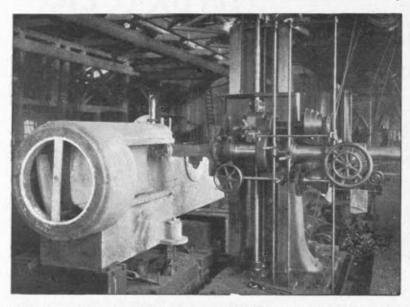
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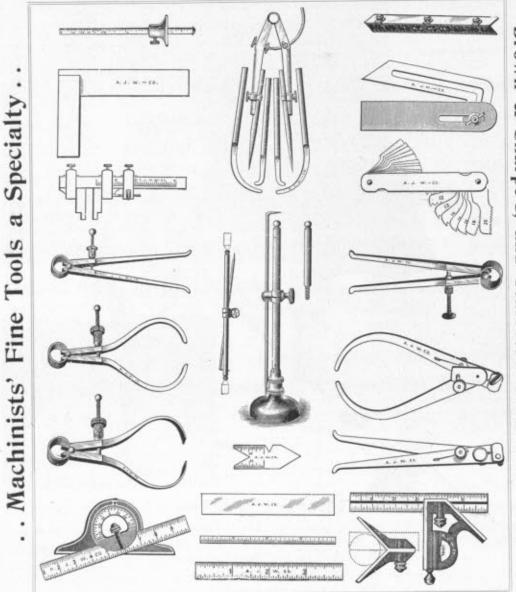
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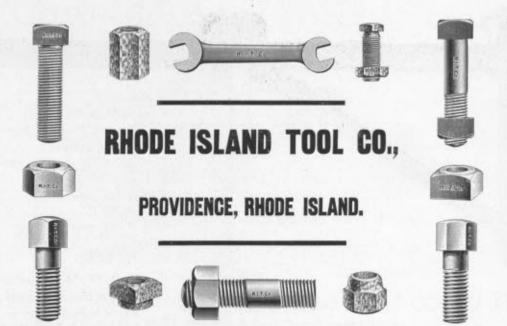
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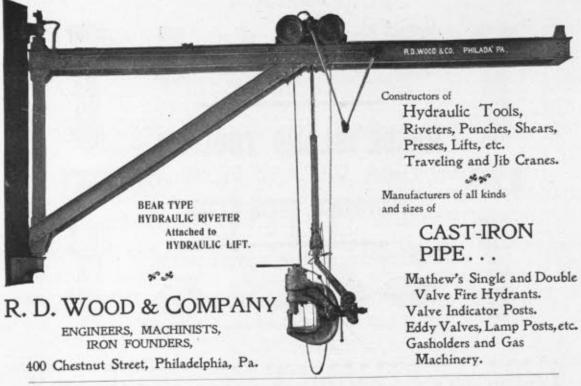
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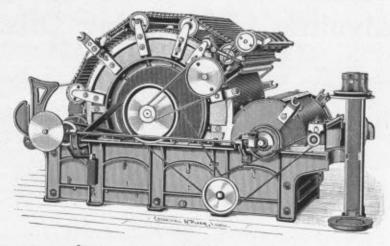




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A. A. A. A.

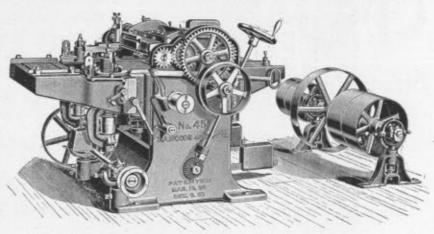
Tanneries: Jellico, Tenn.; Rome, Ga. Main Office and Belt Factory, Hartford, Conn.

### WOOD-WORKING MACHINERY

Specially adapted for

Industrial
Schools,
Colleges,
Etc.

Our line is complete.



#### S. A WOODS MACHINE CO.

172 High Street, Boston, Mass.

#### WOOD=WORKING MACHINERY

No. 4 Triple Drum Sander "New Conqueror," The only one that has never experienced a failure.

OF EVERY DESCRIPTION.

#### HIGHEST CLASS-LARGEST LINE.

More of our make of Wood-Working Machinery is in use, and more is being sold to-day, than any other.

... This tells the tale ...

J. A. FAY & CO.,

554-574 West Front St., Cincinnati, O.



Largest and Best Multiple Vertical Car



#### Handicapped?

Yes, when you attempt with antiquated machinery to compete with those using up to date. We manufacture UP-TO-DATE LABOR-SAVING WOOD-WORKING MACHINERY for PLANING MILLS, SASH and DOOR WORK, FURNITURE FACTORIES, WHEEL and VEHICLE MAKERS, CAR SHOPS, PATTERN MAKERS, ETÇ. Some 150 of the machines are shown on our POSTER, and all are described in our 312-page CATALOGUE, a copy of which we will send to those having use for it.



THE EGAN CO.,

448 - 468 West Front Street.

CINCINNATI, OHIO.

# Che Deanes

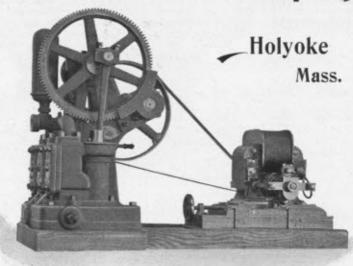
# Steam Pump ... Company

## Steam Pumps

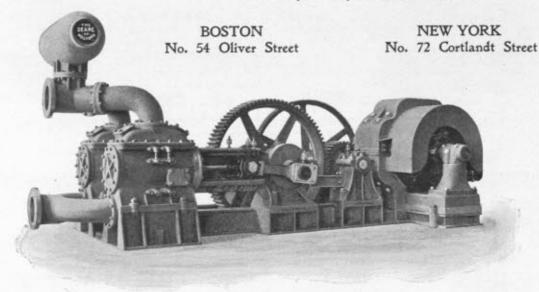
Single ..
Duplex...
Compound
Triple Expansion

## Power Pumps

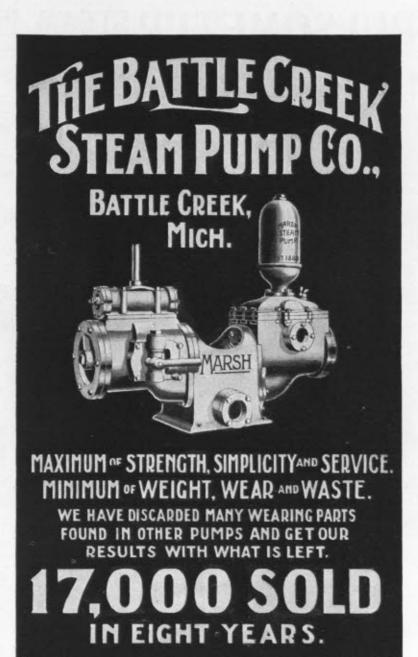
Single... Duplex... Triplex...



DEANE Triplex Pump and Electric Motor.



DEANE Duplex Mine Pump and Electric Motor.



# THE PULSOMETER STEAM PUMP



THE "CONTRACTOR'S FRIEND."

Often Imitated, Never Equaled. Over 20,000 in Use.

RECENT IMPORTANT IMPROVEMENTS.

The Handiest, Simplest, and Most Efficient Steam Pump
For General Mining, Quarrying, Railroad, Irrigating, Draining, Coal-washing,
Sewer and Bridge Contractors' Purposes, etc.

MUDDY OR GRITTY LIQUIDS HANDLED WITHOUT INJURY TO PUMP.

Pulsometer Steam Pump CO.,

CATALOGUE ON APPLICATION. 135 Greenwich St., New York, N.Y.

PERRIN, SEAMANS & CO., N. E. Agents, 57 Oliver Street, Boston, Mass.

## B. F. STURTEVANT COMPANY,

BOSTON, MASS.

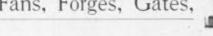
MANUFACTURERS OF

The Sturtevant Blowers,





Exhaust Fans, Forges, Gates,





Steam Engines, Steam Fans,

AND THE

DESCRIPTIVE CATALOGUES ISSUED SHOWING APPLICATIONS.

Sturtevant System of . . .

Heating and Ventilation.

BRANCH STORES:

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131 Liberty Street, New York, N. Y.

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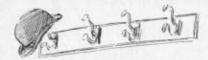
16 South Canal Street, Chicago, Ill.

75 Queen Victoria Street, London, E. C., England.

21 West Nile Street, Glasgow, Scotland.

87 Zimmerstrasse, Berlin, Germany.

2 Kungsholmstorg, Stockholm, Sweden.





Irate Party: Will you bring me a spoon, or not?

Waiter: Very sorry, sir; but you see them Tech. Sophomores dined here last night, and we haven't had time to get any spoons since.

# Rock Drills, Air Compressors

# and..... MINING MACHINERY

The RAND ROCK DRILLS (worked by steam or compressed air) are simple and compact in construction, strong, and built on the interchangeable part system. All necessary Mountings.



Rand Compound Duplex Compressor for Machine Shops.

Send for Catalogue

Little Giant Rock Drill.

Compressors &

Sizes.

For operating Air Lift Pumps, Rock Drills, Coal Cutting Machines, Air Hoists and Pneumatic Tools.

Our COMPOUND DUPLEX COM-PRESSOR is perfect in regulation, and intended for those who wish the most economical results even in small plants. Consumption of fuel and wear of machine strictly proportioned to work done. Has many other attractive features.

# RAND DRILL CO.

100 BROADWAY, ..... NEW YORK.

#### THE PELTON WATER WHEEL

Embracing in its variations of construction and application

#### THE PELTON SYSTEM OF POWER.

In simplicity of construction, absence of wearing parts, high efficiency and facility of adaptation to varying conditions of service, the PELTON meets more fally all requirements than any other wheel made. Propositions given for the development of water powers based upon direct application, or ELECTRIC TRANSMISSION under any head and any requirement as to capacity. Correspondence Invited. Catalogue furnished upon application.

Address PELTON WATER WHEEL CO.

121-23 Main Street, San Francisco, Cal., or 143 Liberty Street, New York.

#### WATER WHEEL.

WATER WHEELS ADAPTED TO ALL HEAD PRESSURES FROM 3 FEET TO 2,000 FEET.

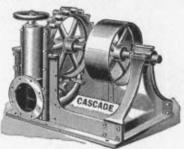
Large and small of all capacities for all purposes. An experience of thirty-five years building Water Wheels enables us to suit every requirement of Water Power Plants. State your Head and Fall and send for pamphlet.

AUTOMATIC and THROTTLING

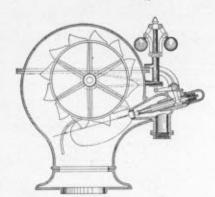
**ENGINE** 

Built in latest style, of best design and highest excellence. Sizes from 3-Horse Power upward, with suitable boilers of steel or iron plates. State your wants and send for pamphlet.

JAMES LEFFEL & CO., Springfield, Ohio, U.S.A.



## TUERK WATER MOTOR



Represents the latest and highest development of Water
Wheels for high pressure.

Especially adapted for Hydrant Pressure. A perfect power for Sewing Machine, Coffee Mill, Church or Parlor Organ, Printing Office, Machine Shops, and all similar uses.

SEND FOR CATALOGUE.

#### STANDARD WATER METER COMPANY,

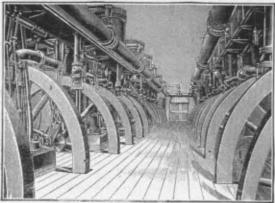
SUCCESSORS TO

TUERK HYDRAULIC POWER CO.

NEW YORK.

CHICAGO.

Is so sorry he took.



12 WEIMER BLOWING ENGINES AT BLAST FURNACE PLANT, ENSLEY, ALABAMA. 42 in. Steam. 84 in. Air. 54 in. Stroke.

#### Compound Corliss Engines for Mills, Electric Light and

Iron Castings from 1 to 40,000 pounds.

PRICES LOW.

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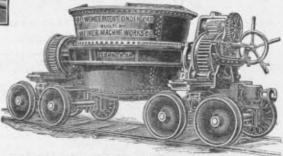
LEBANON, PENN.

BUILDERS OF

Blowing Engines for Blast Furnaces, Steel Works, Silver and Copper Plants, with Corllss or Poppet Steam Valve Gear.

General Machinery for all Purposes.

Iron Cars FOR LIQUID CINDER AND METALS.
Standard and Narrow Gauge of Track.



P. L. WEIMER'S PATENT CINDER CAR. 200 Cubic Feet Capacity. Other Capacities, 75, 110, 125, 160 and 175 Cubic Feet.

#### or Standard Circumshot THE XLCR Water Wheel

ON HORIZONTAL SHAFT.



Saves cost, annoyance, and loss of power incident to use of gears and foot-steps of vertical shaft wheels.

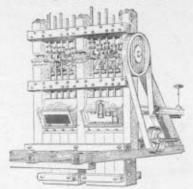
Consistent design, with economic proportions, insuring highest efficiency; yields more power from water applied in varied conditions of use than common to other wheels; often making gains of ro to 30 per cent in available power over the "high bucket, small diameter turbines" now common.

Efficiency, Economy and Excellence Fully Guaranteed.

Humphrey Machine Co., Keene, N. H.

#### FRASER & CHALMERS,

CHICAGO, ILL., U. S. A., with extensive works at Chicago, Ill, and Erith, Kent, England.



#### Manufacturers of Power, Mining, and Metallurgical Machinery.

Solicit correspondence with reference to Mining Sup-plies and the full equipment of Milling, Smelt-ing, Concentrating, and other Reduction Plants.

Riedler Waterworks, Pumps, Air Compressors, Hoists, Corliss Engines, and Boilers.

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Air Furnace Refined Malleable Iron Castings.

Soft and Smooth Gray Iron Castings.

## SUPERIOR STEEL CASTINGS

FROM 1-2 OUNCE TO 200 POUNDS IN WEIGHT.

GRADE I. Steel Castings that will bend, though not of high tensile strength; soft and easily machined, which will harden by ordinary methods. We make in this grade the smallest steel castings that can be made by any process, viz.: parts of Sewing Machines. Typewriters and small Automatic Machinery, Dentists' and Surgical Instruments and Castings which require a high finish.

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BICYCLE STEEL Specially adapted and extensively used for such parts as Crank Hangers, Seat Post Lugs, Frame Connections, Sprockets, etc.



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IN ORDERING SPECIFY GRADE OR KIND OF STEEL REQUIRED.

# The Benjamin Atha & Illingworth Co.

Harrison, N. J.,

Manufacturers of

Merchant Bar Steel Steel Forgings Steel Castings

Highest quality

Tool Steel
Champion
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#### "R. Mushet's" Special Steel

Is the original, and the ONLY THOROUGHLY UNIFORM, self-hardening steel. It is also thoroughly RELIABLE.

For over 20 years it has held a unique position in the markets of the United States, and naturally enough many have tried to imitate its virtues; but for all purposes for which the "Mushet's" is especially recommended, we are constantly in receipt of evidence from the principals of the leading Machine Shops of the United States that it is the MOST DURABLE, THOROUGHLY RELIABLE, and consequently the CHEAPEST Steel they can obtain.

The Trade Marks of "R. Mushet's Special Steel" and R. Mushet's "Titanic" Steel are Registered in the United States.

Sole representatives in the United States,

B. M. JONES & CO.,

Nos. 11 & 13 Oliver St., BOSTON. No. 143 Liberty St., NEW YORK.

#### THE PITTSBURGH REDUCTION CO.

MANUFACTURERS OF

#### Ingots, Bars, Ull Sheet, Wire, .

Cubes, and Castings.

ALFRED E. HUNT, GEO. H. CLAPP, PRESIDENT. SECRETARY.

Main Offices,

To which all correspondence should be directed, No. 121 Third Avenue, . . . . PIT TSBURG, PENN., U. S. A.

Works, New Kensington, Westmoreland County, Penn.; Niagara Falls, Niagara Co., N. Y.



New York Store, Nos. 10 and 11 Havemeyer Building, 26 Cortlandt Street. . . . . . . . . . . . . .

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GOLD MEDAL, PARIS, 1889.

# ESSOP'S

Best English Tool Steel

FOR . . . .

DRILLS, DIES. TOOLS, ETC.

Manufactory, SHEFFIELD, ENGLAND. Chief American Depot, 91 John Street, New York. W. F. WAGNER, General Manager.

WM. JESSOP & SONS, LTD.



Medal, World's Columbian Exposition, 1893.

## CRESCENT STEEL CO.

Pittsburg, Pa.

Manufacturers of

# TOOL AND DIE STEEL

OF THE FINEST QUALITY

ROCK DRILL STEEL,

POLISHED DRILL RODS AND FINE WIRE, SELF-HARDENED STEEL, SHEET STEEL for Saws, Knives, Springs, etc.; SPRING AND MACHINERY STEEL. ...

Die Blocks . . . . . . . .

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Milling Cutter Blanks .

Coiled Springs . . . . . DENVER, COL., NEW YORK, N. Y.,

CHICAGO, ILL.,

Steel Forgings, etc. . . .

1600 17th St. 478 and 480 Pearl St.

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CHAS. MILLAR & SON, Selling Agents, Utica, N. Y.

# UTICA PIPE FOUNDRY CO.



FLANGED PIPE AND FITTINGS, HYDRANTS, GATES, PIG LEAD, JUTE, ETC.

#### CAST IRON PIPE

and Specials for Water and Gas.

WHOLESALE EASTERN AGENTS

AKRON VITRIFIED SEWER PIPE.

Manufacturers of LEAD PIPE, SOLDER, ETC. Jobbers of PLUMBERS' and TINNERS' GOODS

Philadelphia.

Manufacturers of

Phosphor Brows, Brass, ABabbit Metals

for General machine Purposes.

Railroad Work a Speciality

castures 14 pound to 20000 the in weight.

# Rome Brass and Copper Co.

ROME, N.Y.

MANUFACTURERS OF

# Sheet and Bolt Copper,

SHEET BRASS, WIRE, TUBING.

Estimates furnished on Manufactured Articles. & & &

# Cupola Mixtures

For Use in Your Own Foundry to Insure

#### SPECIFIED QUALITY.

High Transverse Strength and Resilience Economically Attained with Tensile Strength

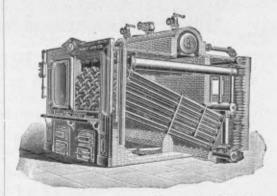
OF 30,000 TO 40,000 POUNDS,

In Turned Test Pieces,
With or without use of Charcoal Pig Iron.
ADDRESS

ASA W. WHITNEY,

1601 Callowhill Street, PHILADELPHIA, PENN.

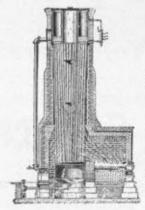
# THE ROOT (WATER TUBE) BOILER.



Stands Unrivaled for Safety, Economy and Durability. Furnishes Dry Steam Rapidly.

ABENDROTH & ROOT MFG. CO.

28 Cliff Street, New York.



"CAHALL"
VERTICAL WATER TÜBE BOILERS.
BABCOCK & WILCOX
HORIZONTAL WATER TÜBE BOILERS.

AULTMAN & TAYLOR MACHINERY CO.
MANSFIELD, OHIO.

SEND FOR ILLUSTRATED CATALOGUE.

CAHALL SALES DEPARTMENT:

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Drexel Bldg , Philadelphia, Pa.
Taylor Bldg , New York, N. Y.
Tremont Bldg , Boston, Mass.
Peninsular Bank Bldg , Detroit, Mich. 712 Union St., N. Orleans, La.



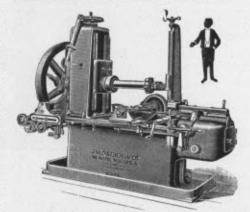
# THEY



## ...FOR... SPEAK Themselves.



# Gear Cutters...



Eberhardt's Patent "New Type," "20th Century" Gear Cutter.

OHIO STATE UNIVERSITY,

COLUMBUS, OHIO. Sept. 19,1895

Gould & Eberhardt,

Newark, N. J.

Gentlemen: --

We received your Shaper this morning. We are much pleased with its appearance and feel sure that it will prove a very useful Allow me to add, that I think I have never seen a tool with so many novel features for convenience in operating.

Thanking you again for your kindness in this matter, I remain,

> Yours very truly, Certin L Willistons

## Potter Printing Press Company, Plainfield Ny viewer 15, 1800,

Messrs, Gould & Eberhardt

Newark, N. J.

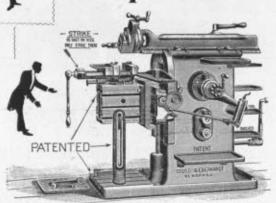
Gentlemen:

We have one of your 36' New Typo Automatic Cear Cutters in use in our Works, and take pleasure in saying that we are highly pleased with it. essentially a 19th, if not a 20th Century Machine, and we will cordially recommend it to any one you may refer

Yours very truly.

POTTER PRINTING PRESS CO.,

Shapers...



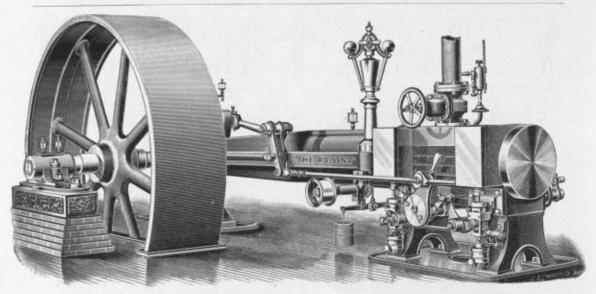
DOUBLE TRIPLE QUICK STROKE

Eberhardt's Patent " Extension Base" Shaper.

GOULD & EBERHARDT.

Designers and High Class Machine Tools, NEWARK, Builders of ..... High Class Machine Tools, N. J.

Our Machine Tool Litera-ture will be generously sup-plied upon request.



# **Automatic Engines**

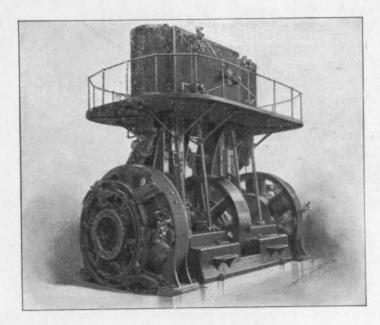
SIMPLE AND COMPOUND

ROLLINS ENGINE COMPANY, & NASHUA, N. H.



AT THE ARMORY.

Col. Commandant: What has thrown your company into such disorder, Captain? Capt. A.: Please sir, it's the peanut shells the ladies in the gallery are throwing.



To Produce Successful and Modern

# Steam Engines

thorough technical training, the best mechanical skill, and good business methods are essential.

THE BALL & WOOD GO.

Office: No. 120 LIBERTY ST., NEW YORK. Works:

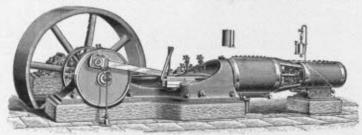
ELIZABETH, N. J.



# .. Buckeye Engine Company...

SALEM, OHIO.

HORIZONTAL AND VERTICAL ENGINES



Condensing and Non-Condensing, Simple, Compound and Multiple Cylinder, for all Classes of work.

BOSTON OFFICE: No. 415 JOHN HANCOCK BUILDING.



The "LINENE" are the Best and Most Economical Collars and Cuffs worn; they are made of fine cloth, both sides finished alike, and, being reversible, one collar is equal to two

of any other kind.

They look like linen, and are the only goods that a well-dressed gentleman can wear in place of real linen.

They are not to be washed; all laundry trouble and expense are avoided.

They are perfect fitting, retaining their shape

better than any other goods.

A box of Ten Collars or Five Pairs of Cuffs for Twenty-five Cents.

A Sample Collar and Pair of Cuffs by mail for Six Cents. Name style and size.

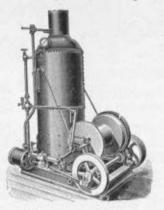
Address .....

#### Reversible Collar Company.

77 Franklin Street, New York. 27 Kilby Street, Boston.

#### HOISTING ENGINES

For Engineers, Builders, Mines, Furnaces, Pile Driving, Excavating, etc.





Durable .... Efficient. Simple.



300 Styles and Sizes. Over 12,000

in use.



#### Elidgerwood Manufacturing Co.

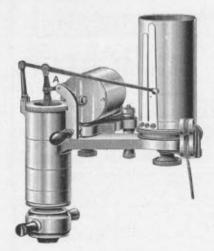
96 LIBERTY STREET, NEW YORK.

BOSTON. CHICAGO.



PHILADELPHI A ST. LOUIS.

# CROSBY Steam Gage and Valve Company.





## The Crosby Steam Engine Indicator

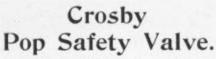
Stands unrivalled for Perfection of Design and Workmanship and for the remarkable accuracy of its diagrams.

It is the Standard in Electric Light and Electric Railway Stations.

When required, the Crosby Indicator will be furnished with Sargent's Electrical Attachment, by which any number of diagrams may be taken simultaneously.

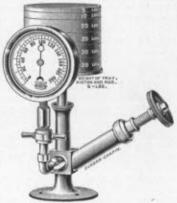
# Crosby Patent Gage Tester.

This machine is designed and constructed on scientific principles, and is a standard of mathematical accuracy.



Simple in construction and easy of management, a perfect protection against any excess of steam pressure.

Is specially approved by the United States Government.



Gage Tester.

The Crosby Indicator, together with the Crosby Pop Safety Valve, Water Relief Valve, Muffled Pop Safety Valve, Improved Steam Pressure Gage, Pressure Recording Gage, Safety Water Gage, Revolution Counter, Original Single Bell Chime Whistle, Spring Seat Globe and Angle Valves, Bosworth Feed-Water Regulator, Branden Patent Pump Valve, and many other Specialties used in connection with Steam, Air and Water, are

MANUFACTURED ONLY BY THE

#### CROSBY STEAM GAGE AND VALVE CO.,

Main Office and Works:

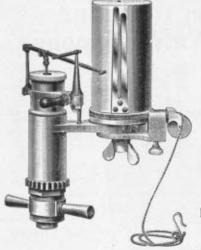
Pop Safety Valve.

Stores: Boston, New York, Chicago,

BOSTON, MASS., U. S. A.

and London, Eng.

Gold fledal, Paris, 1889; fledal and Diploma, Chicago, 1893; Gold fledal and Diploma, Atlanta, 1895.



# American



THOMPSON IMPROVED



## Indicator.

MORE THAN 10,000 IN USE.

Read the following testimonials from Eminent Engineers who have used this Indicator.

CINCINNATI, O., March 8, 1889. AMERICAN STEAM GAUGE Co., Boston.

Gentlemen: — I have used Thompson Steam Engine Indicators for fifteen years, in fact, ever since they were first introduced, and have at all times, and under all conditions of engine service, found them entirely reliable. In all my experience I have never had occasion to complain of the manner in which they performed, and if I were buying Indicators to-day I should buy the Thompson.

I do not know that I can express my regard for these invaluable instruments in any stronger language. Very respectfully,

JOHN W. HILL, C.E.

SIBLEY COLLEGE, CORNELL UNIVERSITY.
ITHACA, N.Y., March 12, 1889.

Gentlemen: — It gives me great pleasure to say that the instruments sent us have proved to be of most excellent quality, and so far as our work has given opportunity to judge, of great accuracy. We have used them on all kinds of work, and at speeds of rotation up to 300, and have found them capable of doing admirably. The finish is excellent, and the sizes and fits all that could be asked. They have been very useful, both in class work and in making engine trials, and eminently satisfactory in all respects. We have had no difficulties with them except such as have come from their use by inexperienced hands. When used for instruction, an occasional accident is to be expected. They have withstood such injuries quite as well as we ought to

expect, and have done more work and better work, even in such hands, than I had supposed possible. Very respectfully yours,

R. H. THURSTON, Director.

EDWARD P. ALLIS Co., RELIANCE WORKS.

MILWAUKEE, WIS., March 14, 1889. AMERICAN STEAM GAUGE Co., Boston, Mass.

Gentlemen: — I have used all the prominent makes of Indicators, but very much prefer the Thompson, and believe it has more good points and less faults than any other instrument made. The easy changing of springs, good leading pulley for the cord, general convenience in handling, and last, but certainly not least, its ability to stand abuse, are some of the features that commend it to the practical engineer. Yours truly, IRVING H. REYNOLDS.

CALUMET AND HECLA MINING COMPANY, Office of the Consulting Engineer,

Cambridgeport, Mass., March 6, 1889. American Steam Gauge Co.,

36 Chardon Street, Boston.

Gentlemen:—I have to say that after quite an extensive use of the Thompson Indicator, I am persuaded that it is a most excellent instrument, and that my confidence in the same is proven by the orders from time to time sent your company.

Yours truly, E. D. LEAVITT, Consulting Engineer.

MANUFACTURED SOLELY BY

#### AMERICAN STEAM GAUGE CO.,

36 Chardon Street, BOSTON, MASS.

New York Branch: 20 Cliff St., New York, N. Y.

Western Branch: 25 West Lake Street, CHICAGO, ILL.

## The Lunkenheimer Company....



Makers of Superior .... Brass and Iron

Specialties.... Oils,....

For Steam, Water. . . .

Lunkenheimer's Steam Specialties are considered the best of their kind made, and are liberally used and indorsed by intelligent steam users everywhere. None as good as Lunkenheimer's if you want the best. All Goods tested and warranted. gratis upon request.

Headquarters:

Cincinnati.

European Store: 35 Great Dover Street, LONDON, S. E.



THE LUNKENHEIMER RE-GRINDING VALVE, the em-bodiment of PERFECTION, unequaled for high class service.

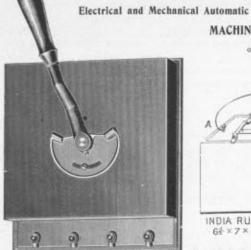
## Warren P. Freeman Co.

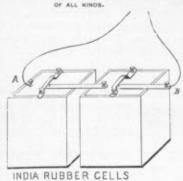
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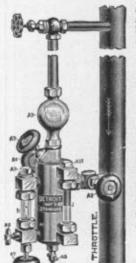




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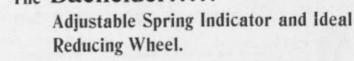
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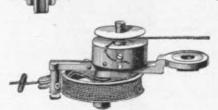
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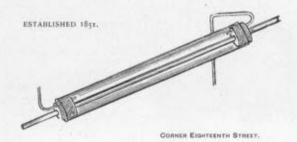
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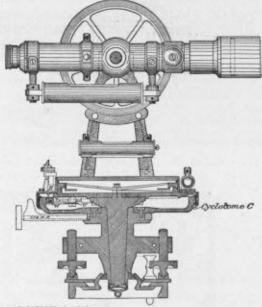
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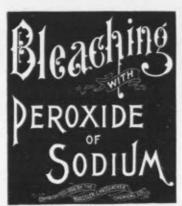
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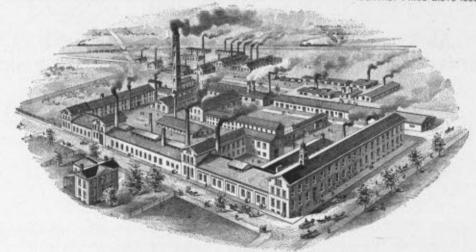


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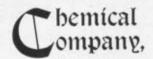
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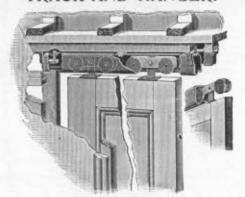
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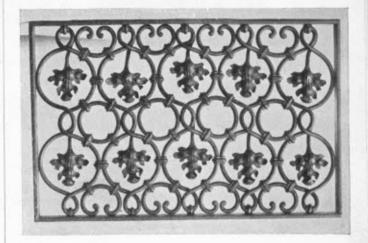
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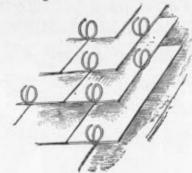
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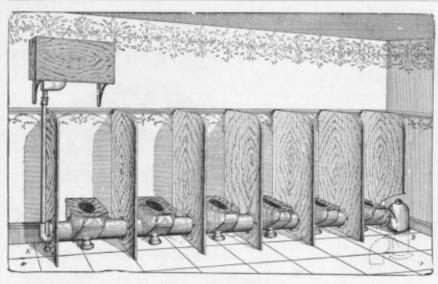
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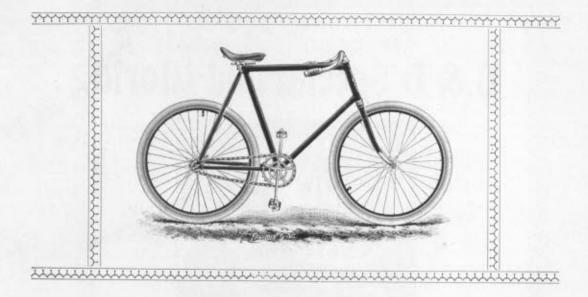
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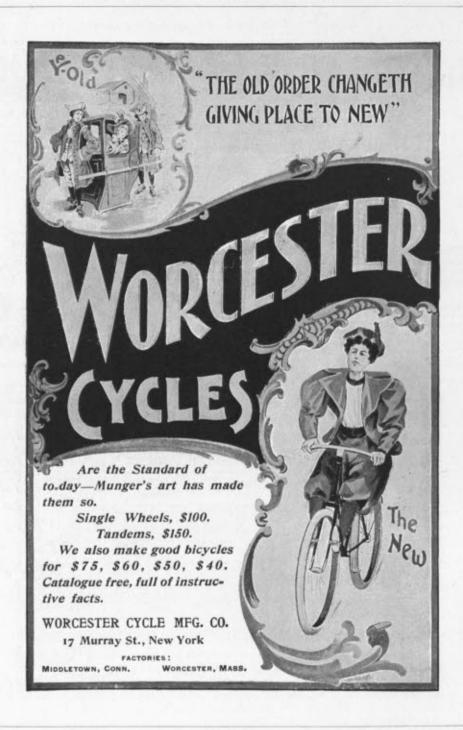
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