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ONE HUNDRED AND FOURTH
ANNUAL CATALOGUE
OF THE
MEDICAL SCHOOL
(BOSTON)
OF
HARVARD UNIVERSITY.
1886-87.

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CAMBRIDGE, MASS.
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1886.

THE MEDICAL SCHOOL.

BOSTON.

Instruction in this School is given by lectures, recitations, clinical teaching, and practical exercises, uniformly distributed throughout the academic year. The year begins on the Thursday following the last Wednesday in September,* and ends on the last Wednesday in June. There is a recess at Christmas, beginning December 23, and ending January 2; and a spring recess, beginning on the Wednesday before Fast Day, and ending on the following Tuesday, inclusive.

The course of instruction has been greatly enlarged, and is so arranged as to carry the student progressively and systematically from one subject to another, in a just and natural order.

In the subjects of anatomy, histology, chemistry, and pathological anatomy, laboratory-work is substituted for, or added to, the usual didactic lectures, and is as much required of every student as attendance at lectures and recitations.

The course of study recommended by the Faculty covers four years, but until further notice the degree of Doctor of Medicine will continue to be given upon the completion of three years of study, to be as ample and full as heretofore. The degree of Doctor of Medicine *cum laude* will be given to candidates who have pursued a complete four years' course, and obtained an average of 75 per cent in all the examinations of this course. In addition to the ordinary degree of Doctor of Medicine as heretofore obtained, a certificate of attendance on the studies of the fourth year will be given to such students desiring it as shall have attended the course, and have passed a satisfactory examination in the studies of the same.

Instead of the customary oral examination for the degree of Doctor of Medicine, held at the end of the three and four year's period of study, a series of written examinations on all the main subjects of medical instruction has been distributed for regular students through their entire course of study. Every candidate for the degree must pass a satisfactory examination in every one of the principal departments of medical instruction, at some time during his period of study.

* That the time of study shall count as a full term, students of every class must present themselves within the first week of the term and register their names with the Secretary.

THE MEDICAL SCHOOL.

FACULTY.

- CHARLES W. ELIOT, LL.D., *President.*
HENRY P. BOWDITCH, M.D., *Dean, and Professor of Physiology.*
OLIVER W. HOLMES, M.D., LL.D., *Professor of Anatomy, Emeritus.*
HENRY J. BIGELOW, M.D., LL.D., *Professor of Surgery, Emeritus.*
FRANCIS MINOT, M.D., *Hersey Professor of the Theory and Practice
of Physic.*
HENRY W. WILLIAMS, M.D., *Professor of Ophthalmology.*
DAVID W. CHEEVER, M.D., *Professor of Surgery.*
JAMES C. WHITE, M.D., *Professor of Dermatology.*
——— *Jackson Professor of Clinical Medicine.*
FRANK W. DRAPER, M.D., *Assistant Professor of Legal Medicine.*
FREDERICK I. KNIGHT, M.D., *Assistant Professor of Laryngology.*
CHARLES B. PORTER, M.D., *Assistant Professor in Surgery.*
EDWARD N. WHITTIER, M.D., *Assistant Professor of Clinical
Medicine.*
J. COLLINS WARREN, M.D., *Assistant Professor in Surgery.*
REGINALD H. FITZ, M.D., *Shattuck Professor of Pathological Anatomy.*
WILLIAM L. RICHARDSON, M.D., *Professor of Obstetrics.*
THOMAS DWIGHT, M.D., *Parkman Professor of Anatomy.*
EDWARD S. WOOD, M.D., *Professor of Chemistry.*
WILLIAM H. BAKER, M.D., *Assistant Professor of Gynaecology.*
WILLIAM B. HILLS, M.D., *Assistant Professor of Chemistry.*
WILLIAM F. WHITNEY, M.D., *Secretary, and Curator of the Ana-
tomical Museum.*
MAURICE H. RICHARDSON, M.D., *Demonstrator of Anatomy, and
Assistant in Surgery.*
FRANCIS H. WILLIAMS, M.D., *Assistant Professor of Materia Medica
and Therapeutics.*

OTHER INSTRUCTORS.

- SAMUEL H. DURGIN, M.D., *Lecturer on Hygiene.*
CHARLES F. FOLSOM, M.D., *Lecturer on Mental Diseases.*
HENRY P. QUINCY, M.D., *Instructor in Histology.*
GEORGE B. SHATTUCK, M.D., *Instructor in Clinical Medicine.*

FRANCIS A. HARRIS, M.D., *Demonstrator of Medico-legal Examinations.*
 JAMES J. PUTNAM, M.D., *Instructor in Diseases of the Nervous System.*

FREDERICK C. SHATTUCK, M.D., *Instructor in the Theory and Practice of Physic.*

EDWARD H. BRADFORD, M.D., *Instructor in Surgery.*

FRANCIS H. DAVENPORT, M.D., *Assistant in Gynaecology.*

THOMAS M. ROTCH, M.D., *Instructor in Diseases of Children.*

GEORGE M. GARLAND, M.D., *Assistant in Clinical Medicine.*

JOSEPH W. WARREN, M.D., *Assistant in Physiology.*

GEORGE W. WEST, M.D., *Demonstrator of Bandaging and Apparatus.*

WILLIAM W. GANNETT, M.D., *Instructor in Pathological Anatomy.*

CHARLES M. GREEN, M.D., *Instructor in Obstetrics.*

CHARLES S. MINOT, S.D., *Instructor in Histology and Embryology.*

WILLIAM C. EMERSON, M.D., *Assistant in Chemistry.*

GEORGE H. MONKS, M.D., *Assistant in Operative Surgery.*

SAMUEL J. MIXTER, M.D., *Assistant Demonstrator of Anatomy.*

HAROLD C. ERNST, M.D., *Demonstrator of Bacteriology.*

ROBERT W. GREENLEAF, M.D., *Assistant in Histology and Embryology.*

CHARLES HARRINGTON, M.D., *Instructor in Hygiene, and Assistant in Chemistry.*

HERMAN F. VICKERY, M.D., *Assistant in Clinical Medicine.*

OTIS K. NEWELL, M.D., *Assistant in Anatomy.*

EDWARD REYNOLDS, M.D., *Assistant in Obstetrics.*

WILLIAM H. POMEROY, M.D., *Assistant in Materia Medica and Therapeutics.*

The following gentlemen will give special clinical instruction:—

THEODORE W. FISHER, M.D., *in Mental Diseases.*

JOHN HOMANS, M.D., *in the Diagnosis and Treatment of Ovarian Tumors.*

FRANCIS B. GREENOUGH, M.D., and ABNER POST, M.D., *in Syphilis.*

OLIVER F. WADSWORTH, M.D., *in Ophthalmoscopy.*

J. ORNE GREEN, M.D., and CLARENCE J. BLAKE, M.D., *in Otology.*

GEORGE L. WALTON, M.D., *in Diseases of the Nervous System.*

JAMES R. CHADWICK, M.D., *in Diseases of Women.*

ELBRIDGE G. CUTLER, M.D., and WILLIAM W. GANNETT, M.D., *in Auscultation.*

ARTHUR T. CABOT, M.D., *in Genito-urinary Surgery.*

The Medical School is at the corner of Boylston and Exeter Streets, Boston, and the address of the Dean is Dr. H. P. BOWDITCH, Harvard Medical School, Boston.

STUDENTS.

COURSE FOR GRADUATES.

Clarkson, James Booth (<i>Licentiate Royal Coll.</i> <i>Phys. and Surg. Edin.</i>)	London, Eng.
Cheney, Frederick Edward, M.D.	Boston.
Davenport, James Henry, PH.B. (<i>Brown Univ.</i>), M.D. (<i>Univ. of Vermont</i>)	Fall River.
Dunbar, Eugene Fillmore, M.D.	Roxbury.
Hall, William Dudley, M.D.	Boston.
Jackson, Henry, A.B., M.D.	Boston.
Jeffries, John Amory, A.B., M.D.	Boston.
King, Stephen Henry, M.D.	Providence, R. I.
Nottage, Herbert Percy, M.D.	Chelsea.
Parsons, Frank Sears, M.D. (<i>Univ. of the City of</i> <i>New York</i>)	Dorchester.
Smith, Jared Knapp, M.D. (<i>Coll. of Phys. and</i> <i>Surgeons, N. Y.</i>)	[Islands. Koloa Kanai, Hawaiian

FOURTH CLASS.

Brownrigg, John Sylvester,	Roxbury.
Bunker, Frederic Story, A.B.	Cambridge, Me.
Burrage, Walter Lincoln, A.B.	Boston.
Cochran, William James,	Milford.
Connell, Charles Walter, A.M. (<i>Brown Univ.</i>)	Fall River.
Cushing, Edward Fitch, PH.B. (<i>Cornell Univ.</i>)	Cleveland, O.
Dow, Edmund Scott, A.B.	Brookline.
Eaton, Percival James, A.B.	Maplewood.
Foley, Walter James Paul,	Roxbury.
Francis, Richard Pearce, A.B.	Brookline.
Harrington, Frank Abram, A.B.	Orangeport, N. Y.
Horgan, John Augustus,	Boston.
Leitch, John Alvin,	Andover.
Lewis, Edwin Ransome,	Westerly, R. I.
Mahoney, John Bernard,	Peabody.
Mara, Frank Timothy, A.B. (<i>Holy Cross Coll.</i>)	Boston.
Morrison, William Alexander,	E. Boston.
O'Callaghan, Dennis Francis,	Salem.
Sargent, George Amory, A.B.	Boston.
Stearns, Daniel Waldo,	Newton.
Stone, Arthur Kingsbury, A.B.	Framingham.

THIRD CLASS.

Austin, Arthur Everett, A.B. (<i>Bowdoin Coll.</i>)	<i>Readville, Me.</i>
Barnes, Francis John, A.B. (<i>Boston Coll.</i>)	<i>Watertown.</i>
Bolton, Charles James,	<i>Somerville.</i>
Briggs, Charles Poor, A.B.	<i>Lawrence.</i>
Bryant, William Sohier, A.B.	<i>Boston.</i>
Bullard, John Thornton, A.B.	<i>New Bedford.</i>
Burns, Hiram Hutchins, A.B. (<i>Tufts Coll.</i>)	<i>Kingston.</i>
Byron, James Tolman,	<i>Stoneham.</i>
Chandler, Norman Fitch,	<i>Mooers, N. Y.</i>
Clark, Nathaniel Herbert, PH.G. (<i>Coll. of Pharm.</i>)	<i>Boston.</i>
Cobb, Frederic Codman, A.B.	<i>Boston.</i>
Cogan, Joseph Ambrose, A.B.	<i>Cambridge.</i>
Collins, Orville William, A.M. (<i>Bates Coll.</i>)	<i>So. Framingham.</i>
Cowles, William Norman,	<i>Ayer.</i>
Cummings, Michael Aloysius,	<i>Fall River.</i>
Cummings, Mott Alvah, A.M. (<i>Dartmouth Coll.</i>)	<i>Claremont, N. H.</i>
Davis, Edward Curtis,	<i>Central Falls, R. I.</i>
Denton, Myron Preston, A.B.	<i>Saratoga Springs, N. Y.</i>
Drummev, Nicholas Daniel,	<i>Boston.</i>
Ensworth, William Howard,	<i>E. Boston.</i>
Fallon, Michael Francis, A.B. (<i>Holy Cross Coll.</i>)	<i>Worcester.</i>
Fay, William Eastman, A.B. (<i>Univ. of Minn.</i>)	<i>Cambridge.</i>
Fillebrown, Charles Dalton,	<i>Portland, Me.</i>
Finney, John Miller Turpin, A.B. (<i>Princeton Coll.</i>)	<i>Bel Air, Md.</i>
Fox, William Yale,	<i>Taunton.</i>
Gilman, Warren Randall, A.B.	<i>Boston.</i>
Goodale, Walter Temple, A.B. (<i>Bowdoin Coll.</i>)	<i>Saco, Me.</i>
Gould, Clarke Storer,	<i>So. Boston.</i>
Greene, Edward Miller, A.B. (<i>Amherst Coll.</i>)	<i>Boston.</i>
Hall, Henry Bailey, LL.B. (<i>Boston Univ.</i>)	<i>E. Boston.</i>
Harkins, Daniel Stanislaus,	<i>Newtonville. —</i>
Hayes, Thomas Joseph,	<i>Beverly.</i>
Helm, Charles James, A.B. (<i>Georgetown Coll.</i>)	<i>Peru, Ind.</i>
Holmes, John Parker, A.B.	<i>Philadelphia, Pa.</i>
Howard, Edward,	<i>Brookline.</i>
Hunting, Nathaniel Stevens, A.B.	<i>Des Moines, Iowa.</i>
Hurley, Daniel Bartholomew,	<i>Arlington.</i>
Jack, Edwin Everett, A.B.	<i>Boston.</i>
Jameson, Winthrop Marston,	<i>Cambridge.</i>
Jones, Gilbert Norris, A.B.	<i>Bangor, Me.</i>
Kales, John Davis,	<i>Chicago, Ill.</i>
Kaufman, Franklin John,	<i>Syracuse, N. Y.</i>

Kennon, Charles Edward Vere,	<i>Goshen, Conn.</i>
Lewis, Joshua Francis, s.B. (<i>Dartmouth Coll.</i>)	<i>Malden.</i>
Libby, George Wesley Harding, A.B. (<i>Colby Univ.</i>)	<i>No. Gorham, Me.</i>
Lord, William Tyler, A.B.	<i>Roxbury.</i>
Lyon, Arthur Vinal, A.B. (<i>Amherst Coll.</i>)	<i>Brockton.</i>
McCarthy, Eugene Allan, A.B. (<i>Boston Coll.</i>)	<i>Cambridge.</i>
McNally, William Joseph,	<i>Charlestown.</i>
Mahoney, John Francis, A.B.	<i>Waltham.</i>
Mayberry, Charles Bradford, A.M. (<i>Tufts Coll.</i>)	<i>East Weymouth.</i>
Metcalf, Harold, A.B. (<i>Brown Univ.</i>)	<i>Providence, R. I.</i>
Morris, James Stewart,	<i>So. Boston.</i>
O'Connor, John James,	<i>Springfield.</i>
Padula, Thomas Francis, A.B. (<i>Holy Cross Coll.</i>)	<i>Quincy.</i>
Peirson, Edward Lawrence, A.B.	<i>Boston.</i>
Peters, John Matthews,	<i>Syracuse, N. Y.</i>
Phillips, William Abbott, PH.B. (<i>Northwestern Univ.</i>)	<i>Evanston, Ill.</i>
Phippen, Hardy, A.B.	<i>Salem.</i>
Plummer, Henry Lincoln,	<i>E. Boston.</i>
Schaake, Frederick Henry,	<i>Lawrence.</i>
Sears, Henry Francis, A.B.	<i>Boston.</i>
Shea, Thomas Bernard, A.B. (<i>Holy Cross Coll.</i>)	<i>Boston.</i>
Thorndike, Augustus, A.B.	<i>Brookline.</i>
Thorndike, Paul, A.B.	<i>Milwaukee, Wis.</i>
Tuck, Lorenzo Wadsworth, A.B. (<i>Amherst Coll.</i>)	<i>So. Weymouth.</i>
Walker, John Baldwin, A.B.	<i>Boston.</i>
Webster, George Arthur,	<i>Boston.</i>
Wesselhoeft, William Fessenden, A.B.	<i>Boston.</i>
Wilmarth, Frederick Augustus,	<i>Upton.</i>
Worcester, Charles Pomeroy, A.B.	<i>Newtonville.</i>

SECOND CLASS.

Abbott, Harlan Page, A.B. (<i>Brown Univ.</i>)	<i>Antrim, N. H.</i>
Anthony, Francis Wayland, A.B.	<i>Bradford.</i>
Arnold, Horace David, A.B.	<i>Newton.</i>
Bell, Robert Mowry, s.B. (<i>Univ. of Minn.</i>)	<i>Minneapolis, Minn.</i>
Bemis, John Merrick,	<i>Worcester.</i>
Blake, Harrison Gray,	<i>Woburn.</i>
Bradford, Martin Luther, A.B.	<i>Boston.</i>
Burr, Chauncey Rea, PH.B. (<i>Yale Univ.</i>)	<i>Portland, Me.</i>
Burrough, Thomas True,	<i>Roxbury.</i>
Carroll, Thomas Francis,	<i>Watertown.</i>
Chadbourne, Arthur Patterson, A.B.	<i>Cambridge.</i>

Chamberlain, Allen Howard, A.B.	<i>Foxcroft, Me.</i>
Clark, Frank Haven, A.B.	<i>Boston.</i>
Clark, Horace, A.B.	<i>Somerville.</i>
Clark, Leonard Brown, A.B.	<i>Weston.</i>
Craigin, George Arthur, A.B.	<i>Boston.</i>
Darraha, Rufus Elmer,	<i>Newport, R. I.</i>
Day, Frank Leslie, A.B. (<i>Brown Univ.</i>)	<i>Keene, N. H.</i>
Donahue, Hugh,	<i>Haverhill.</i>
Draper, Joseph Rutter, A.B. (<i>Williams Coll.</i>)	<i>Boston.</i> [N. Y.]
Dunham, Theodore, A.B.	<i>Irrington-on-Hudson,</i>
Eliot, George,	<i>Brookline.</i>
Fisk, Arthur Lyman, A.B. (<i>Yale Univ.</i>)	<i>Northampton.</i>
Frye, Gardiner,	<i>Allston.</i>
Gaffney, John Patrick, A.B. (<i>Holy Cross Coll.</i>)	<i>Danvers.</i>
Garceau, Edgar,	<i>Boston.</i>
Goldthwait, Joel Ernest, S.B. (<i>Mass. Agric. Coll.</i>)	<i>Marblehead.</i>
Greenwood, Allen,	<i>Waltham.</i>
Harding, George Franklin,	<i>Boston.</i>
Hare, Charles Henry, PH.B. (<i>Brown Univ.</i>)	<i>Suffield, Conn.</i>
Harrington, Thomas Francis,	<i>Lowell.</i>
Hastings, Daniel Gott, A.B. (<i>Univ. of Rochester</i>)	<i>Rochester, N. Y.</i>
Heffernan, James Andrew,	<i>Cambridgeport.</i>
Johnson, Edward Stearns,	<i>Boston.</i>
Keep, Charles Manning,	<i>Boston.</i>
Kilroy, Philip, A.B. (<i>Holy Cross Coll.</i>)	<i>Springfield.</i>
Lewis, Henry Foster, A.B.	<i>Chicago, Ill.</i>
Lincoln, Jacob Read,	<i>Millbury.</i>
Lippincott, Albert Church,	<i>Columbia Falls, Me.</i>
Mahoney, Stephen Andrew, A.B. (<i>Holy Cross Coll.</i>)	<i>Gloucester.</i>
Mansfield, Robert Joseph, A.B. (<i>Holy Cross Coll.</i>)	<i>Springfield.</i>
Moras, Edmond Raymond,	<i>Lawrence.</i>
Morse, Charles Ellsworth,	<i>Wareham.</i>
Morse, Charles Francis, A.B.	<i>Boston.</i>
Moulton, Rufus, A.B. (<i>Colby Univ.</i>)	<i>Springvale, Me.</i>
Mowry, Jesse Everett,	<i>Greenville, R. I.</i>
Mumford, James Gregory, A.B.	<i>Rochester, N. Y.</i>
O'Doherty, John Dominic, A.B. (<i>Montreal Coll.</i>)	<i>Boston.</i>
Paige, John Dudley,	<i>Boston.</i>
Perkins, Fred,	<i>Manchester, N. H.</i>
Peterson, Reuben, A.B.	<i>E. Boston.</i>
Reeves, Marcellus,	<i>Boston.</i>
Remington, Frederick DeLoss,	<i>Rochester, N. Y.</i>
Robinson, Rowland Rodman,	<i>Wakefield, R. I.</i>

Shay, Thomas McGuire, A.B. (<i>Boston Coll.</i>)	<i>Roxbury.</i>
Stanard, Albert Cushman, B.L. (<i>Univ. of Michigan</i>)	<i>Ann Arbor, Mich.</i>
Stewart, Ferdinand Augustus, A.B. (<i>Fisk Univ.</i>)	<i>Mobile, Ala.</i>
Stone, George Arthur,	<i>Ipswich.</i>
Storer, Malcolm, A.B.	<i>Newport, R. I.</i>
Sullivan, John Francis, A.B. (<i>Mount St. Mary's Coll.</i>)	<i>Charlestown.</i>
Thayer, William Darwin,	<i>Fredonia, N. Y.</i>
Thayer, William Sydney, A.B.	<i>Cambridge.</i>
Thompson, Fred,	<i>Salem.</i>
Tilton, Edward James, A.B.	<i>Andover.</i>
Treviño, Manuel Francisco, S.B. (<i>St. Joseph's Coll., Ky.</i>)	<i>Matamoras, Mexico.</i>
Underhill, Charles Dudley,	<i>Chelsea.</i>
Utley, Edward Roswell, A.B. (<i>Amherst Coll.</i>)	<i>Newton.</i>
Wardwell, William Tecumseh Sherman,	<i>Boston.</i>
Welch, Edward Augustus, S.B. (<i>Wesleyan Univ.</i>)	<i>Worcester.</i>
Wentworth, Arthur Howard,	<i>Boston.</i>
Wenzlick, William, LL.B. (<i>Univ. of California</i>)	<i>San Francisco, Cal.</i>
Winn, Charles Henry, A.B. (<i>Boston Coll.</i>)	<i>Boston.</i>
Woodbury, William Richardson, A.B. (<i>Tufts Coll.</i>)	<i>Melrose.</i>
Yocom, James Reed, A.B.	<i>Richmond, Staten Island, N. Y.</i>

FIRST CLASS.

Ahearne, Cornelius Augustus,	<i>Lynn.</i>
Andrews, Ezekiel Bennett,	<i>Freedom, N. H.</i>
Ayer, Richard Gilbert,	<i>Haverhill.</i>
Bacon, Edward Sawyer,	<i>Dover, N. H.</i>
Banks, Herbert Huntington,	<i>Barrington, N. S.</i>
Bates, Everett Alanson, A.B. (<i>Yale Univ.</i>)	<i>Danielsonville, Conn.</i>
Beaumont, William Shepherd,	<i>Jamaica Plain.</i>
Blake, Joseph Matthew,	<i>Boston.</i>
Bolster, Percy Gardner, A.B.	<i>Roxbury.</i>
Bonney, Sherman Grant, A.B. (<i>Bates Coll.</i>)	<i>Manchester, N. H.</i>
Bowen, Horace,	<i>No. Attleboro'.</i>
Bremner, Samuel Kimball, A.B. (<i>Yale Univ.</i>)	<i>Boxford.</i>
Brown, Augustus Homer, A.B. (<i>Bowdoin Coll.</i>)	<i>Brunswick, Me.</i>
Brown, Walter Atwood,	<i>Salmon Falls, N. H.</i>
Burns, Edward Lewis,	<i>E. Somerville.</i>
Bustillo, Antonio, A.B. (<i>Institute of Santander</i>)	<i>Cuba.</i>
Campbell, Patrick Henry,	<i>So. Boston.</i>
Carpenter, Irving Lloyd,	<i>Manchester, N. H.</i>

Carpenter, Thomas Bernard,	<i>Saxonville.</i>
Carroll, Francis Edward, A.B. (<i>Fordham Coll.</i>)	<i>Boston.</i>
Churchill, Frank Spooner, A.B.	<i>Milton.</i>
Clark, Clinton Dewey, A.B. (<i>Univ. of Rochester</i>)	<i>Haverhill.</i>
Clark, Walter Thomas, A.B.	<i>Cambridgeport.</i>
Coley, William Bradley, A.B. (<i>Yale Univ.</i>)	<i>Westport, Conn.</i>
Crafts, Leo Melville, B.L. (<i>State Univ. of Minn.</i>)	<i>Minneapolis, Minn.</i>
Deal, Edward Elvin,	<i>E. Boston.</i>
Derby, William Parsons,	<i>Boston.</i>
Dickerman, Josiah Pope,	<i>Foxboro'.</i>
Doe, Charles Cutler, S.B. (<i>Mass. Inst. of Technol.</i>)	<i>Boston.</i>
Forman, Herbert Shaw,	<i>Lynn.</i>
Forrest, Lawrence Francis,	<i>Cambridge.</i>
Foster, Clarendon Atwood,	<i>Bridgetown, N. S.</i>
Fuller, Daniel Hunt, A.B. (<i>Brown Univ.</i>)	<i>Providence, R. I.</i>
Gaveau, Céran,	<i>Hayti.</i>
Gibson, Charles Langdon, A.B.	<i>Boston.</i>
Gray, Charles Henry,	<i>Waltham.</i>
Grouard, John Shackford,	<i>Exeter, N. H.</i>
Hall, George Clifton,	<i>Chelsea.</i>
Heydecker, Henry Reading, A.B. (<i>Trinity Coll.</i>)	<i>New York, N. Y.</i>
Holden, Eugene Martin, A.B. (<i>Bates Coll.</i>)	<i>Otisfield, Me.</i>
Huddleston, John Henry, A.B.	<i>Boston.</i>
Jenkins, Thomas Lincoln,	<i>Revere.</i>
Jones, Charles David, A.B. (<i>Boston Univ.</i>)	<i>Melrose.</i>
Jones, Lyman Asa, A.B. (<i>Lawrence Univ.</i>)	<i>Appleton, Wis.</i>
Kaan, George Warton,	<i>Somerville.</i>
Kelcher, Francis Joseph, A.B. (<i>Boston Coll.</i>)	<i>Boston.</i>
Kelley, George Draper,	<i>Worcester.</i>
Kenefick, Joseph Aloysius,	<i>Lawrence.</i>
Kenison, Nehemiah Samuel, A.B.	<i>Allenstown, N. H.</i>
Kingsley, George Lyle, A.B. (<i>Yale Univ.</i>)	<i>Rome, N. Y.</i>
Kingsley, Willey Lyon, A.B. (<i>Yale Univ.</i>)	<i>Rome, N. Y.</i>
McCabe, James Edward, A.B. (<i>Holy Cross Coll.</i>)	<i>No. Chelmsford.</i>
McCallum, Oscar Fritzallen,	<i>Maitland, N. S.</i>
McCarthy, Thomas Horatio,	<i>No. Easton.</i>
McPherson, William Ellsworth,	<i>Canton.</i>
McQueeney, Francis Joseph,	<i>Boston.</i>
Mallory, Frank Burr, A.B.	<i>Cleveland, O.</i>
Milliken, Walter Louis,	<i>Boston.</i>
Moroney, William Joseph,	<i>Pawtucket, R. I.</i>
Morrill, George Albert,	<i>Boston.</i>
Morris, George Patrick, A.B.	<i>Boston.</i>

Nichols, Edward Hall, A.B.	<i>Reading.</i>
Nourse, Ernest Procter,	<i>Peabody.</i>
Noyes, Atherton, A.B. (<i>Yale Univ.</i>)	<i>So. Byfield.</i>
O'Leary, William Curran,	<i>Boston.</i>
Palmer, Franklin Sawyer, A.B.	<i>Boston.</i>
Palmer, George Monroe,	<i>Boston.</i>
Payne, James Henry, A.B.	<i>Boston.</i>
Peckham, Frank Edwin, P.B. (<i>Brown Univ.</i>)	<i>Providence, R. I.</i>
Pelton, Clarence Whitfield,	<i>Dedham.</i>
Pinckard, Charles Philip, A.B.	<i>Cincinnati, O.</i>
Pindar, Harry Cooper,	<i>Boston.</i>
Pratt, Charles Augustus, A.B.	<i>E. Somerville.</i>
Prouty, Albert Henry,	<i>No. Brookfield.</i>
Pudor, Gustave Adolph, A.B.	<i>Portland, Me.</i>
Ray, John Edward, .	<i>Boston.</i>
Reeve, James Spofford, A.B. (<i>Lawrence Univ.</i>)	<i>Appleton, Wis.</i>
Rogers, Albert Edward,	<i>Boston.</i>
Seelye, Ralph Holland, A.B. (<i>Amherst Coll.</i>)	<i>Northampton.</i>
Shaw, Henry Alden,	<i>Tivoli-on-Hudson, N. Y.</i>
Smith, Arthur Donaldson, A.B. (<i>Univ. of Penn.</i>)	<i>Andalusia, Pa.</i>
Smith, Edward Samuel, A.B. (<i>Holy Cross Coll.</i>)	<i>Pawtucket, R. I.</i>
Smith, William Lord, A.B.	<i>Boston.</i>
Somers, George Burbank, A.B.	<i>San Francisco, Cal.</i>
Swasey, William Pray,	<i>Salem.</i>
Sweeney, Hilary Tucker,	<i>E. Boston.</i>
Swett, Eddy Benjamin,	<i>W. Medford.</i>
Taylor, John Thomson,	<i>Brookline.</i>
Thomas, John Jenks, A.B. (<i>Williams Coll.</i>)	<i>Columbus, O.</i>
Thompson, John McQuaid, A.B.	<i>Webster.</i>
Treviño, Donaciano, S.B. (<i>St. Joseph's Coll., Ky.</i>)	<i>Matamoras, Mexico.</i>
Whittemore, Frank Stowell,	<i>Sandwich.</i>
Williams, William Frederic, A.B. (<i>Brown Univ.</i>)	<i>Bristol, R. I.</i>
Young, Henry Dudley,	<i>Boston.</i>

SUMMARY.

RESIDENT GRADUATES	11
FOURTH CLASS	21
THIRD CLASS	71
SECOND CLASS	74
FIRST CLASS	94
TOTAL	271

THE MEDICAL SCHOOL.

REQUIREMENTS FOR ADMISSION.

All candidates for admission, except those who have passed an examination for admission to Harvard College, must present a degree in Letters, Science, or Medicine, from a recognized college or scientific school, or pass an examination in the following subjects:—

1. ENGLISH. Every candidate will be required to write, legibly and correctly, an original English composition of not less than two hundred words, and also to write English prose from dictation.

2. LATIN. The translation of easy Latin prose.

3. PHYSICS. A competent knowledge of Physics (such as may be obtained from Balfour Stewart's Elements of Physics).

4. ELECTIVE SUBJECT. Each candidate must pass an approved examination in any *one* of the following subjects: French, German, the Elements of Algebra or of Plane Geometry, Botany.

Whenever the candidate shall give evidence of having passed a satisfactory examination in any of the above requirements either at Harvard College or at the Lawrence Scientific School, a subsequent examination in such subject or subjects will not be demanded for his admission to the Medical School.

Candidates will be admitted conditionally who pass in two of the four subjects; but, until these conditions are made up, no student will be permitted to take part in any exercises of the third class, or present himself for examination in the subjects of that class.

The examinations will be held at the Medical School and conducted in writing; specimens of the papers used will be found in the Catalogue to be obtained of the Dean. In judging the work of the candidate, the spelling, grammar, and construction will be considered.

The examinations for admission are held on the Thursday following the last Wednesday in June, and on the Monday preceding the last Wednesday in September, beginning at 10 A.M.

In 1887 the *examinations for admission* will ALSO be held at the following places, beginning at 8 A.M. on Thursday, June 30:—

In *Andover*, in rooms of the Phillips Academy; in *Quincy*, in rooms of the Adams Academy; in *Exeter, N.H.*, in rooms of the Phillips Exeter Academy; in *New York*, in the lecture-room of the Young Men's Christian

Association, Twenty-third Street, corner of Fourth Avenue; in *Philadelphia*, in the library-hall of the Academy of Natural Sciences, S. W. corner of Nineteenth and Race Streets; in *Cincinnati*, in the rooms of the Law School, College Building, Walnut Street; in *Chicago*, (place to be announced later); in *St. Louis*, in the Central High School building, corner of Olive and Fifteenth Streets; in *San Francisco*, in rooms of the Boys' High School, on Sutter Street, between Gough and Octavia Streets; and in some convenient city in Europe, to be announced later.

DIVISION OF STUDIES.

FOUR YEARS' COURSE.

For the First Year. — Anatomy, Physiology, General Chemistry,* and Materia Medica.

For the Second Year. — Practical and Topographical Anatomy, Medical Chemistry, Pathological Anatomy, Clinical Medicine, Surgery, and Clinical Surgery.

For the Third Year. — Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgery, and Clinical Surgery.

For the Fourth Year. — Ophthalmology, Otology, Dermatology, Syphilis, Laryngology, Mental Diseases, Diseases of the Nervous System, Diseases of Women, Diseases of Children, Obstetrics, Clinical and Operative Obstetrics, Clinical Medicine, Clinical and Operative Surgery, Legal Medicine, Orthopedic Surgery, Genito-urinary Diseases, Diseases of the Rectum, Exanthemata, Hygiene, Vaccination, Bacteriology, Clinical Microscopy, and the Preparation of Food for Infants and Invalids.

THREE YEARS' COURSE.

For the First Year. — Anatomy, Physiology, General Chemistry,* and Materia Medica.

For the Second Year. — Practical and Topographical Anatomy, Medical Chemistry, Pathological Anatomy, Clinical Medicine, and Clinical Surgery.

For the Third Year. — Therapeutics, Obstetrics, Theory and Practice of Medicine, Clinical Medicine, Surgery, Clinical Surgery, Ophthalmology, Dermatology, Syphilis, Otology, Laryngology, Mental Diseases, Diseases of the Nervous System, Diseases of Women, Diseases of Children, Legal Medicine.

* Any student who shall have previously passed in the Undergraduate department or Scientific School of Harvard University an examination in General Chemistry (including qualitative analysis) will be exempt from examination in this branch, and may pursue the study of Medical Chemistry during his first year. The latter privilege will be granted to students from other colleges and scientific schools who have received instruction in general chemistry equivalent in character and amount to that of the first year, on passing a satisfactory examination at the September examination, provided that satisfactory evidence of such previous study be sent to the Dean of the Faculty one month before the date of this examination.

METHODS OF INSTRUCTION.

The following methods of instruction are adopted in the several departments:—

Anatomy.—Lectures; various practical exercises, including abundant dissection, under the direction of the Demonstrator; recitations and demonstrations; histology, and embryology. The histological department has been reorganized, and the laboratories have been placed under the charge of special instructors. General class instruction in the use of the microscope and in practical histology is offered to the first-year students. Accommodations are provided for those students who wish to pursue special or advanced courses. Facilities for original work are duly provided; students wishing to carry out any histological or embryological research receive all necessary assistance, and special efforts are made to provide material for original work. Microscopes are provided for those whose means do not permit the purchase of these instruments.

Physiology.—Lectures, recitations, conferences, and practical demonstrations in the Laboratory. To students of the second, third, and fourth classes, opportunities are given for original investigations in the Laboratory.

Chemistry is taught mainly by practical work in the Laboratory, the student having his own desk and apparatus. Descriptive Chemistry and qualitative analysis are taught during the first year. Besides the laboratory-work, there is a lecture and a recitation every week. In the second year medical chemistry is taught by lectures, recitations, and exercises in the Laboratory.

Pathological Anatomy is taught by lectures, recitations, and practical instruction in pathological histology. The collection of the Warren Anatomical Museum is used to illustrate the lectures, and morbid specimens in a fresh state are shown at the recitations, where the student is called upon to describe the appearances. Students also receive practical instruction in the method of making autopsies, being present at those made at both hospitals. The instruction in pathological histology, including the diagnosis of tumors, is continued throughout the year. Each student, provided with a microscope, the necessary instruments and reagents, prepares the various objects and submits them for explanation and criticism. The formation of small classes for special work and the individual pursuit of original investigations are encouraged.

The school possesses a sufficient number of microscopes for the use of those students whose means will not permit the purchase of an instrument.

Materia Medica and Therapeutics.—Materia Medica is taught by lectures and recitations with exhibition of medicines and pharmaceutical processes. Besides the large and complete cabinet of materia medica in

the Museum, a collection of officinal drugs and chemicals, and of all the important preparations is placed where it can be seen by the students at any time. The physiological action of drugs and their application to disease is taught in the third year by a course of lectures upon Therapeutics and by recitations and demonstrations.

The Theory and Practice of Medicine. — Lectures, recitations, and hospital visits.

Clinical Medicine. — Daily instruction is given in this department by hospital visits and other exercises. Students are furnished with cases for personal examination, and are called upon to report them before the class, where they are criticised. These examinations are held both in the wards and in the amphitheatre. Another exercise, known as the clinical conference, affords an opportunity for more thorough preparation of cases, more time being allowed for their study. The full written report of a case is read by the student who has examined it. It is afterwards criticised by the class, by the Assistant Professor of Clinical Medicine, and other teachers in the School. In addition to this, a regular course of supplementary instruction is given in Auscultation and Percussion, and in Laryngoscopy, which affords students an abundant opportunity for acquiring a thoroughly practical knowledge of these methods of exploration.

Surgery. — Lectures and recitations. There are also courses on Surgical Anatomy, Minor Surgery, Surgical Histology, Bandaging, and Operative Surgery. In the last, students of the third and fourth classes are supplied with material for repeating the usual surgical operations.

Instruction in Clinical Surgery is given at the Massachusetts General Hospital and City Hospital, each week throughout the year, as follows:—

One clinical lecture, one clinical conference, two visits in the hospital wards, and two public operating days.

The clinical lecture is given over surgical cases brought into the operating theatre, and is illustrated by explorations and operations. At the surgical conference second and third year students make a full written report of a surgical case, which is then criticised by their fellow-students and by the Professor. Every candidate for a degree is required to report a case in clinical surgery.

Obstetrics. — Lectures and recitations. Students are required to take charge of cases of obstetrics in their third year. A course on operative obstetrics, with practical illustrations on the cadaver, is given during the second half-year.

Diseases of Women. — Lectures, recitations, and practical instruction at the different dispensaries in the education of the touch. In these institutions every facility is given the student to become familiar with the different forms of uterine disease. A course in operative gynaecology extending throughout the year at the Free Hospital for Women is open to students

of the third and fourth classes. To students of the fourth class and to post-graduates cases are assigned for personal examination; these cases are reported in full at the clinical conference, and are made the subject of discussion by members of the class and the instructor. These students are also called upon to assist at the operations in the operative course.

Diseases of Children. — Lectures and clinical instruction.

Ophthalmology. — A complete course is delivered upon the diseases of the eye, including clinical instruction and the use of the ophthalmoscope.

Dermatology is taught by lectures and clinical illustrations. The special out-patient department at the Massachusetts General Hospital furnishes ample opportunities for illustration.

Syphilis. — Recitations and clinical instruction.

Otology. — Lectures and clinical instruction.

Laryngology. — Lectures and demonstrations.

Diseases of the Nervous System. — Lectures and demonstrations.

Legal Medicine. — Lectures, recitations, and demonstrations.

Embryology and Histology. — Lectures.

Hygiene. — Lectures and demonstrations.

TEXT-BOOKS.

The following works are recommended as text-books, and for collateral reading and consultation: —

ANATOMY.

Text-Books. — Gray (10th edition). Quain (9th edition). Wilson. Holden's Manual. Holden's Landmarks. Dwight's Frozen sections of a Child. Treves' Applied Anatomy.

Collateral Reading. — Harrison Allen's Anatomy. Tillaux, Anatomie Topographique. Dwight's Anatomy of the Head. Holden's Osteology. Humphrey's Human Skeleton. Morris, on the Joints. Klein's Atlas of Histology. Foster and Balfour's Embryology. Klein's Histology. Whitman's Methods in Microscopic Anatomy. Carnoy's Biologie cellulaire.

PHYSIOLOGY.

Text-Books. — Dalton's Human Physiology. Foster's Text-book of Physiology. Martin, The Human Body. Kirke's Handbook of Physiology.

Collateral Reading. — Pavy, on Food and Dietetics. Fick, Compendium der Physiologie. Gangee's Physiological Chemistry of the Animal Body. McGregor-Robertson's Elements of Physiological Physics. Landois' Manual of Human Physiology.

GENERAL CHEMISTRY.

Text-Books. — Bartley's Medical Chemistry.

Collateral Reading. — Miller's, Roscoe and Schorlemmer's, or Fownes' Chemistry. Douglass and Prescott's, or Fresenius' Qualitative Analysis.

MEDICAL CHEMISTRY.

Text-Books. — Tyson, Practical Examination of Urine. Wharton and Stillé's Medical Jurisprudence, Vol. II., on Poisons, 4th edition.

Collateral Reading. — Ultzmann and Hoffmann's Atlas der Harnsedimente. Neubauer and Vogel, Analysis of the Urine. Hoppe-Seyler, Physiologische Chemie. Taylor on Poisons. Wormley's Micro-Chemistry of Poisons.

MATERIA MEDICA.

Text-Books. — United States Dispensatory. Mann's Prescription Writing. *Collateral Reading.* — United States Pharmacopoeia. National Dispensatory. Bentley and Trimmen's Medicinal Plants. Brunton's Pharmacology, Therapeutics, and Materia Medica.

PATHOLOGICAL ANATOMY.

Text-Books. — Ziegler's Pathological Anatomy and Pathogenesis. Orth's Compend of Diagnosis in Pathological Anatomy.

Collateral Reading. — Friedlaenders Use of the Microscope in Clinical and Pathological Examinations. Coats's Manual of Pathology.

THERAPEUTICS.

Text-Books. — H. C. Wood's Therapeutics. Chamber's Manual of Diet. *Collateral Reading.* — Stillé's Therapeutics and Materia Medica. Bartholow's Materia Medica and Therapeutics. Ringer's Therapeutics.

OBSTETRICS.

Text-Books. — Lusk's Manual of Midwifery. *Collateral Reading.* — Schroeder's Manual of Midwifery. Cazeaux's Midwifery. Winckel's Diseases of Childbed. Barker's Puerperal Diseases, Schauta's Grundriss der operativen Geburtshilfe.

THEORY AND PRACTICE.

Text-Books. — Strümpell's Text-Book of Medicine. *Collateral Reading.* — Pepper's System of Practical Medicine by American authors. Flint's Practice of Medicine. Cutler and Garland's Percussion Outlines.

CLINICAL MEDICINE.

Text Books. — Flint's Practice of Medicine. Flint's Manual of Percussion and Auscultation. *Collateral Reading.* — Same as in Theory and Practice.

SURGERY.

Text-Books. — Bryant's Practice of Surgery. Billroth's Surgical Pathology. Smith's Operative Surgery. *Collateral Reading.* — Holmes's System of Surgery. The International Encyclopedia of Surgery. Van Buren and Keyes's Genito-urinary Organs and Syphilis. Guérin, Éléments de Chirurgie Opératoire.

GYNAECOLOGY.

Text-Books. — Thomas, on the Diseases of Women. Fifth Edition. *Collateral Reading.* — Emmet's Principles and Practice of Gynaecology. Klob's Pathological Anatomy of the Female Sexual Organs. Savage, The Surgery, Surgical Pathology, and Surgical Anatomy of the Female Pelvic Organs.

OPHTHALMOLOGY.

Text-Books. — Williams, Soelberg Wells, Nettleship, Zehender. Loring, on the Ophthalmoscope. Landolt, on Refraction and Accommodation.

The following tabular view illustrates the distribution of studies throughout the year.

1886-87, FROM SEPTEMBER 30 TO JUNE 29.

First Class.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	†Materia M., L.	Histology. Laboratory.	*Practical Physiol. Physiol. L.	Histology. Laboratory.	†Materia M.	
10	†Embryol. L.				*Anatomy, R.	Physiol. R.
11	Physiol. L. or Cont.	Physiol. L.	Chemistry, R.	Chemistry, L.	Physiol. L.	Chemis. R. or L. 1st 10 w. *Pract. Physiol.
12	Anatomy, L.	Anatomy, L.	Anatomy, L.	†Hygiene, L.	Laboratory.	
2	Laboratory.	Laboratory.	Laboratory.	Laboratory.	Laboratory.	
3	Laboratory.	Laboratory.	Laboratory.	Laboratory.	Laboratory.	
4		Laboratory.	Laboratory.	Laboratory.	Laboratory.	
5	Pract. Anat.	Pract. Anat.	Pract. Anat.	Pract. Anat.	Pract. Anat.	

* In sections.

† During first half year.

‡ During second half year.

Second Class.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
8	†Bandaging.	†Bandaging.	†Bandaging.	†Bandaging.	†Bandaging.	†Bandaging.
9	Clin. Med. M.	Clin. Med. C. D.	Clin. Med. L. M.		Clin. Med. C. D.	
10	†Laryngo'py. M. 10.30 Clin. Sur. after Dec.	†Laryngo'py. Clin. Surg. C.	†Laryngo'py. Laboratory.	†Laryngo'py. Laboratory.	†Laryngo'py. C. Surg. Visit.	†Laryng'py. M. Surg. Visit.
11	*Auscultation M. and D.	*Auscultation Laboratory.	*Auscultation	*Auscultation	*Auscultation C. Operations.	*Auscult. M. Operations.
12	Laboratory.		Surg. Conf. M.		Pathology, L.	Museum.
2	Chemistry, L.	Path. Histology.	Chemistry, R.	†Bact'y. 6 L.	Path. Histology.	
3	Pathology. R. & Dem.		Pathology, L.	Pathology. Dem. & R.		
4	Theo. & Pr. R.	Surgery, R.	Theo. & Pr. R.	Adv. Anat. L.	Clin. Conf.	
5	Pract. Anat.	Pract. Anat.	Pract. Anat.	Pract. Anat.	Pract. Anat.	

* Till February in sections.

† Till January in sections.

‡ After February.

At five o'clock, practical exercises in anatomy, in which all classes may take part, will be conducted by the Demonstrator.

Clinical Surgery at M. & C. in sections, of which due notice will be given.

Third Class.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.
9	Clin. Med. M.	Clin. Med. C. D.	Clin. Med. L. M.	Otol. L., Oct., Nov., Cl. E., Dec., Jan., Feb.	Clin. Med. Ophthal. Cl. Clin. Otolology, Jan., Feb., Mar. C.	
10	10.30 Surg. Cl. M. after Dec.	Surg. Cl. Oct. till Apr. C. Gynaecol. Cl. D.	Cl. Dermatology. M.	Dis. of Nerv. System. M.	Surg. Visit. C. Gynaecol. Cl. D. till April.	Surg. Visit. M.
11	Surg. L., till Jan.		Diseases of Children.		Operations, C. Diseases of Children, D.	Operations. M.
12	Obstetrics, R.	Surg. Anat. L. Mar. & Apr.	Surg. Conf. M.	Surgery, L.	* Syphilis. D. Surg. Anat., L. Mar. & Apr.	Museum.
2	Gynaecol. L.		Leg. Med. L. till Feb.	* Ophthal. L.		
3	Theo. & Prac. L.	* Ophthalmol- ogy, L. † Mental Dis.	Obstetrics, L.	Theo. & Prac. L.	Obstetrics, L.	Ment. Dis. Cl. * S.B. Sch. for Feeb Mind. Chil.
4	Therapeutics,	Dermatology, L.	Therapeutics.	Therapeutics.	Clinical Conf.	
5	Pract. Anat.	Pract. Anat.	Pract. Anat.	Pract. Anat.	Pract. Anat.	

* During first half year.

† During second half year.

A. = McLean Insane Asylum; C. = Boston City Hospital; Ch. = Children's Hospital; Cl. = Clinic; D. = Boston Dispensary; E. = Eye and Ear Infirmary; L. = Lecture; Ly. = Lying-in Hospital; M. = Massachusetts General Hospital; O.P.Cl. = Out Patient Clinic; R. = Recitation; S. = Samaritan Home; S.B. = So. Boston Insane Asylum; W. = Free Hospital for Women.

These abbreviations refer to the following as well as to the above tables.

Fourth Class. — MONDAY.

	October.	November.	December.	January.	February.	March.	April.	May.
9	AB CD	Surgical Vis., C. Eye Cl., C.	Ear Cl., E. Eye Cl., C.	Ear Cl., E. Ear Cl., C.	Ear Cl., E. Ear Cl., C.	Ear Cl., C.	Eye Cl., C. Surgical Vis., C.	Eye Cl., C. Surgical Vis., C.
10	AB CD	Child. Dis., D. Dis. of Rec., D.	Child. Dis., D. Dis. of Rec., D.	Child. Dis., D. Dis. of Rec., D.	Dis. of Rec., D. Child. Dis., D.	Dis. of Rec., D. Child. Dis., D.	Dis. of Rec., D. Child. Dis., D.	Dis. of Rec., D. Child. Dis., D.
11	AB CD	Syph. Cl., D. Surg., M. Obstet. Cl., Ly.	Syph. Cl., D. Surg., M. Obstet. Cl., Ly.	Syph. Cl., D. Surg., M.	Surg. V., M. Syph. Cl., D.	Surg. V., M. Syph. Cl., D.	{ Surg. V., M. Surg. V., Ly. Syph. Cl., D.	{ Surg. V., M. Surg. V., Ly. Syph. Cl., D.
12		Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.
3		Surgery, Ch.	Surgery, Ch.	Surgery, Ch.	Hygiene.	Hygiene.		Cooking School.
4		Orthoped., Ch.	Orthoped., Ch.	Ovarian.	Ovarian.	Practical Hyg.		Cooking School.
5							D. Visit.	D. Visit.

TUESDAY.

6	AB CD	Medical V., M.	Medical V., M.	Larynx, M. Nervous D., M.	Larynx, M. Nervous D., M.	Larynx, M. Nervous D., M.	Nervous D., M.	Nervous D., M.
10	AB CD	Skin Dis., M. Medical V., M.	Skin Dis., M. Medical V., M.	Skin Dis., M. Medical V., M.	Medical V., M. Skin Dis., M.	Medical V., M. Skin Dis., M.	Medical V., M. Skin Dis., M.	Medical V., M. Skin Dis., M.
11	AB CD	Med. V., S. Ophthalm., M.	Med. V., S. Ophthalm., M.	Med. V., S. Ophthalm., M.	Ophthalm., M. Med. V., S.	Ophthalm., M. Med. V., S.	Ophthalm., M.	Ophthalm., M.
12		Genito-Urin., M.	Genito-Urin., M.	Genito-Urin., M.	Genito-Urin., M.	Auscult., M.	Auscult., M.	Auscult., M.
3-5		Legal Med., C.	Legal Med., C.	Legal Med., C.	Legal Med., C.	Legal Med., C.	Legal Med., C.	Legal Med., C.
5							D. Visit.	D. Visit.

WEDNESDAY.

9	AB CD	O. P. Cl., M. Eye Cl., C.	Ear Cl., E. Eye Cl., C.	Ear Cl., E. Ear Cl., C.	Ear Cl., E. Ear Cl., C.	Ear Cl., C.	Eye Cl., C. O. P. Cl., M.	Eye Cl., C. O. P. Cl., M.
10	AB CD	Skin Cl., M. Gynaecol., D.	Skin Cl., M. Gynaecol., D.	Skin Cl., M. Gynaecol., D.	{ Gynaecol., D. O. P. Cl., C. Skin Cl., M.	{ Gynaecol., D. O. P. Cl., C. Skin Cl., M.	{ O. P. Cl., C. Gynaecol., D. Skin Cl., M.	{ O. P. Cl., C. Gynaecol., D. Skin Cl., M.
11		Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.	O. P. Cl., C.	O. P. Cl., C.	O. P. Cl., C.	O. P. Cl., C.
12		Orthoped., Ch.	Orthoped., Ch.	Orthoped., Ch.	Hygiene.	Hygiene.		Cooking School.
3								Cooking School.
4								Cooking School.
5							D. Visit.	D. Visit.

THURSDAY.

9	AB CD	Otology.	Otology.	Nervous D., M. Laryn., M.	Nervous D., M. Laryn., M.	Nervous D., M.
10	AB CD	Child. Dis., D. { Gen. Urin., D. O. P. Cl., D.	Child. Dis., D. { Gen. Urin., D. Surgical Visit, C.	{ Gen. Urin., D. Child. Dis., D. Surgical Visit, C.	{ Gen. Urin., D. Child. Dis., D. Surgical Visit, C.	{ Gen. Urin., D. Child. Dis., D. Surgical Visit, C.
11	AB CD	Gynaecol. Cl., W.	Gynaecol. Cl., W.	Gynaecol. Cl., W.	Gynaecol. Cl., W.	Gynaecol. Cl., W.
3		Gynaecol. Oper., W.	Gynaecol. Oper., W.	Gynaecol. Oper., W.	Gynaecol. Oper., W.	Gynaecol. Oper., W.
5				Child. Cl., D.	Child. Cl., D.	Child. Cl., D.

FRIDAY.

9	AB CD	Medical V., M.	Medical V., M.	Laryn., M. Nervous D., M.	Laryn., M. Nervous D., M.	Medical V., M.
10	AB CD	Skin Dis., M. O. P. Cl., M.	Skin Dis., M. O. P. Cl., M.	O. P. Cl., M. Skin Dis., M.	O. P. Cl., M. Skin Dis., M.	O. P. Cl., M. Skin Dis., M.
11	AB CD	Obstet. Cl., Ly. Surgical Vis., M.	Obstet. Cl., Ly. Surgical Vis., M.	Surgical Vis., M.	Surgical Vis., M.	Surgical Vis., M. Obstet. Cl., Ly.
12		Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.	Gynaecol. Cl.
3		Clinical Med., C.	Clinical Med., C.	Clinical Med., C.	Clinical Med., C.	Ment. Dis. Cl., A.
4			Bacteriology.	Bacteriology.	Bacteriology.	Ment. Dis. Cl., A.
5						D. Visit.

SATURDAY.

9	AB CD	Otology.	Otology.	Nervous D., M. Laryn., M.	Nervous D., M. Laryn., M.	{ Vaccination, City Institut'n.
10	AB CD	Gynaecol. Cl., C. Gynaecol., D.	Gynaecol. Cl., C. Gynaecol., D.	Gynaecol., D. Gynaecol. Cl., C.	Gynaecol., D. Gynaecol. Cl., C.	Gynaecol., D. Gynaecol. Cl., C.
11		Clinical Med., D.	Clinical Med., D.	Clinical Med., D.	Clinical Med., D.	Clinical Med., D.
12		Clinical Micro.	Clinical Micro.	Clinical Micro.	Clinical Micro.	
3		Mental Dis., S. B.	Mental Dis., S. B.	Mental Dis., S. B.	Mental Dis., S. B.	

The course in Operative Gynaecology will be given in May, from 7 to 9 P.M.

INSTRUCTION FOR 1886-87 TO STUDENTS OF THE THREE YEARS' COURSE.

Anatomy.

Descriptive Anatomy. *Four times a week.* Professor DWIGHT.

Practical Anatomy, with Exercises in Dissection. *Eight hours daily from October 15th till May.* Demonstrations and Recitations. Drs. M. H. RICHARDSON, MIXTER, and NEWELL.

Topographical and Advanced Anatomy. *Once a week.* Professor DWIGHT.

Laboratory Exercises in Histology. *Twice a week.* Drs. QUINCY and C. S. MINOT.

Histology and Embryology. *Twenty lectures during the first half-year.* Dr. C. S. MINOT.

Physiology.

Systematic and Experimental Physiology. *Four times a week.* Professor BOWDITCH.

Laboratory Exercises in Experimental Physiology. Dr. J. W. WARREN.

Chemistry.

Descriptive and Analytical Chemistry. *Twice a week, with an additional weekly exercise during the first ten weeks.* Assistant Professor HILLS.

Medical and Toxicological Chemistry. *Twice a week.* Professor WOOD. Practical Exercises in the Laboratory in Analytical and Medical Chemistry. *Daily.* Professor WOOD, Assistant Professor HILLS, and Drs. EMERSON and HARRINGTON.

Materia Medica and Therapeutics.

Materia Medica, with the Exhibition of Drugs. *Twice a week during the second half-year.* Assistant Professor F. H. WILLIAMS.

Therapeutics, with Demonstrations. *Twice a week.* Recitations. *Once a week.* Assistant Professor F. H. WILLIAMS.

Hygiene.

Lectures and Demonstrations. *Once a week during the second half-year.* Dr. HARRINGTON.

Pathology and Pathological Anatomy.

General Pathology and Pathological Anatomy. *Twice a week.* Professor FITZ.

Special Pathological Anatomy, with Demonstrations. *Twice a week.* Professor FITZ.

Laboratory Exercises in Pathological Histology. *Twice a week.* Drs. WHITNEY and GANNETT.

Practical Instruction in Performing Autopsies. *Throughout the year.* Professor FITZ and Dr. GANNETT.

Surgery.

Surgery. *Once a week.* Professor CHEEVER.

Surgical Pathology. *Once a week till January.* Assistant Professor J. C. WARREN.

Clinical Surgery. *Once a week till January.* Professor CHEEVER. *Once a week from January till March.* Assistant Professor PORTER.

Once a week from March till June. Assistant Professor J. C. WARREN.

Surgical Conference. *Once a week from November till May.* Assistant Professor PORTER.

Operative Surgery, Demonstrative Course. *Fifteen practical exercises.* Assistant Professor PORTER assisted by Dr. MONKS.

Recitations in Surgery and Surgical Pathology. *Once a week.* Assistant Professor J. C. WARREN.

Surgical Anatomy and Operative Surgery. *Twice a week in March and April.* Assistant Professor PORTER.

Application of Bandages and Apparatus. *Laboratory exercises to the class in sections, from October till January.* Assistant Professor J. C. WARREN and Dr. WEST.

Surgical visits are made at the Massachusetts General Hospital by Assistant Professors PORTER and J. C. WARREN, and Drs. BEACH, HOMANS, M. H. RICHARDSON and CABOT. — At the City Hospital, by Professor CHEEVER and Drs. GAY, BOLLES, BRADFORD, POST and GAVIN. — The Surgical Cases at the Eye and Ear Infirmary and at the Boston Dispensary are shown by the surgeons in charge.

Ophthalmology.

Diseases of the Eye. *Twice a week during the first half-year.* Professor H. W. WILLIAMS.

Clinical Ophthalmology. *Once a week till January, and after March.* Professor H. W. WILLIAMS.

Dermatology.

Diseases of the Skin. *Once a week.* Professor WHITE.

Clinical Dermatology. *Once a week.* Professor WHITE.

Syphilis.

Practical Diagnosis and Treatment of Syphilis. *Once a week for a half-year.* Dr. POST.

Otology.

Otoscopy. *Once a week in November.* Dr. BLAKE.

Clinical Otology. *Once a week from November till April.* Drs. J. O. GREEN and BLAKE.

Special Pathology and Therapeutics.

Theory and Practice of Physic. *Twice a week.* Professor F. MINOT.
Recitations. *Twice a week.* Dr. F. C. SHATTUCK.

Clinical Medicine. *Twice a week.* Assistant Professor WHITTIER.

Clinical Conference. *Once a week.* Assistant Professor WHITTIER, and Drs. GARLAND and G. B. SHATTUCK.

Practical Instruction in Auscultation and Percussion. *Five times a week during the first half-year.* Drs. GARLAND, CUTLER, and GANNETT.

Practical Diagnosis and Treatment of Diseases of the Larynx. *Six times a week, first half-year.* Assistant Professor KNIGHT.

Practical Diagnosis and Treatment of Diseases of Children. *Twice a week.* Dr. ROTCH.

Practical Diagnosis and Treatment of Diseases of the Nervous System. *Once a week.* Dr. PUTNAM.

Mental Diseases. *Once a week.* Dr. FISHER.

Legal Medicine. *Twenty lectures.* Assistant Professor DRAPER.

Medical visits are made at the Massachusetts General Hospital by Professors F. MINOT and WHITTIER and by Drs. ABBOT, TARBELL, W. L. RICHARDSON and F. C. SHATTUCK — At the City Hospital, by Drs. BLAKE, LYMAN, DOE, MASON, SUMNER, G. B. SHATTUCK, FORSTER, FOLSOM and DENNY. — At the Danvers, South Boston, and Somerville Asylums for the Insane. — The Medical Cases at the Boston Dispensary are shown by the physicians in charge.

Obstetrics.

Theory and Practice of Obstetrics. *Twice a week.* Professor W. L. RICHARDSON. Recitations. *Once a week.* Dr. C. M. GREEN.

Operative Obstetrics. *Twelve practical exercises.* Dr. C. M. GREEN.

Practical Instruction in Clinical Obstetrics. *Throughout the year.* Dr. C. M. GREEN.

Gynaecology.

Twice a week. Assistant Professor BAKER. Two clinics each week during the second half-year. Assistant Professor BAKER. Two clinics each week during the first half-year. Dr. DAVENPORT.

INSTRUCTION FOR 1886-87 TO STUDENTS OF THE FOURTH YEAR.

Clinical Medicine.

Once a week for two months. Professor F. MINOT. *Once a week for three months.* Professor W. L. RICHARDSON. *Twice a week for one month.* Assistant Professor WHITTIER. *Once a week for six months.* Dr. G. B. SHATTUCK. *Once a week for six months.* Dr. F. C. SHATTUCK. *Twice a week for two months.* *Once a week for six months.* Dr. GARLAND. *Twice a week for two months.* *Once a week for two months.* Dr. TARBELL. *Once a week for four months.* Dr. GANNETT. *Once a week for one month.* Dr. CUTLER. *Once a week for two months.* Dr. VICKERY.

Diseases of Children.

Twice a week for eight months. Dr. ROTCH. *Five times a week for two months.* Drs. ROTCH and BUCKINGHAM.

Diseases of the Nervous System.

Four times a week for three months. *Twice a week for two months.* Dr. PUTNAM.

Surgery.

Clinical Surgery. *Once a week for two months.* Professor CHEEVER. *Twice a week for two months.* Assistant Professor PORTER. *Twice a week for two months.* Assistant Professor J. C. WARREN. *Once a week for one month.* Dr. M. H. RICHARDSON. *Twice a week for three months.* Dr. BEACH. *Twice a week for two months.* Dr. GAY. *Once a week for four months.* Dr. BOLLES. *Three times a week for four months.* Dr. BURRELL. *Once a week for three months.* Dr. ELLIOT. *Once a week (two hours) for two months.* Dr. WATSON. *Once a week for three months.* Dr. WEST. *Once a week for one month.* Dr. MIXTER. *Once a week for one month.* Dr. F. B. HARRINGTON.

Operative Surgery. Practical Exercises. Assistant Professor PORTER and Drs. M. H. RICHARDSON, MIXTER and MONKS.

Orthopedic Surgery. *Twice a week for three months.* Dr. BRADFORD.

Ovarian Tumors.

Once a week for two months. Dr. HOMANS.

Obstetrics.

Twice a week for five months. Professor W. L. RICHARDSON.

Operative Obstetrics. Practical Exercises. Dr. C. M. GREEN.

Gynaecology.

Once a week (two hours) for eight months. Assistant Professor BAKER. *Three times a week for eight months.* Dr. CHADWICK. *Twice a week for*

four months. Dr. DAVENPORT. *Once a week for three months.* Dr. LYMAN. *Once a week for five months.* Dr. DOE. *Twice a week for four months.* Dr. SWIFT.

Operative Gynaecology. *Practical Exercises.* Assistant Professor BAKER and Dr. DAVENPORT.

Dermatology.

Three times a week for eight months. Professor WHITE.

Syphilis.

Once a week for eight months. Dr. GREENOUGH.

Ophthalmology.

Twice a week for five months. Professor H. W. WILLIAMS. *Once a week for eight months.* Dr. WADSWORTH.

Otology.

Four times a week for one month. *Three times a week for two months.* *Once a week for two months.* Dr. C. J. BLAKE. *Twice a week for three months.* Dr. J. O. GREEN.

Laryngology.

Four times a week for three months. Assistant Professor KNIGHT.

Diseases of the Genito-Urinary Apparatus.

Once a week for four months. Dr. CABOT. *Once a week for four months.* Dr. WATSON. *Once a week for four months.* Dr. TILDEN.

Diseases of the Rectum.

Once a week for eight months. Dr. HODGES.

Legal Medicine.

Once a week for eight months. Assistant Professor DRAPER. *Demonstrations.* Dr. HARRIS.

Hygiene.

Once a week (two hours) for two months. Dr. DURGIN.

Vaccination.

Once a week for one month. Dr. DURGIN.

Bacteriology.

Once a week for three months. Dr. ERNST.

Clinical Microscopy.

Once a week for four months. Professor FITZ and Dr. WHITNEY.

Cookery.

Twice a week (two hours) for one month. Boston Cooking School.

CLINICAL ADVANTAGES.

The Medical Department of the University is established in Boston, in order to secure those advantages for Clinical Instruction and for the study of Practical Anatomy which are found only in large cities.

There are Hospital visits or operations daily.

The Massachusetts General Hospital.—During the past year, 2,327 patients were treated in the wards, and 17,016 in the out-patient departments. Patients are received from all parts of the United States and the Provinces, and are visited by the students, with the attending physicians and surgeons, on four days in the week. Operations are numerous, and are performed in the amphitheatre, which is provided with seats for 400 persons. Clinics in the following special branches have been established in connection with the out-patient department: Dermatology, Laryngology, Diseases of the Nervous System, and Ophthalmology.

The City Hospital.—During the past eight months, 3,550 cases were treated in its wards, and 8,271 in its various out-patient departments. The medical wards always contain many cases of acute diseases, and changes are taking place constantly. The opportunities for seeing fractures, injuries, and traumatic cases of all kinds are excellent, since, on an average, 800 street accidents are yearly treated. Surgical operations are performed in the amphitheatre. Diseases of the eye, the ear, and the skin are largely treated in the out-patient department. Clinical instruction is given by the physicians and surgeons twice a week.

In these two hospitals, the facilities for witnessing Operative Surgery are unsurpassed. Twice a week operations are performed in the presence of the class. The number of these operations is large, reaching nearly two thousand a year. The variety is great, embracing every surgical disease and injury, including the surgical operations on the eye and ear.

The Boston Dispensary.—36,956 patients were treated at this Public Charity during the past year. A new building has lately been erected at a cost of \$50,000, where students have ample and excellent opportunity for seeing practical work in the diagnosis and treatment of cases illustrating the various branches of medicine and surgery.

The Massachusetts Charitable Eye and Ear Infirmary.—The nine thousand patients annually treated at this institution present every variety of disease of the ear and eye, and supply a large number of operations.

The Marine Hospital at Chelsea receives from the shipping of the port a large number of patients, who furnish examples of the diseases of foreign countries and of distant parts of the United States. Many cases of venereal disease, in its various forms, are treated annually.

The Free Hospital for Women.—In the wards of this institution, which is devoted exclusively to the diseases peculiar to women, abundant oppor-

tunity is offered to study the severer forms of uterine disease and to witness operations which are performed once a week throughout the year.

Students are also permitted to visit the Children's Hospital and the Carney Hospital on application to the physicians on duty.

There are twenty-five appointments annually for Internes in the various hospitals, and as many more for Assistants in the out-patient departments. Appointments for the Massachusetts General and City Hospitals are for the term of eighteen months, for the Boston Lying-in Hospital for four months, and for the Free Hospital for Women for nine months.

EXAMINATIONS.

The regular examinations are conducted in writing and are held at the end of each year in June, and a week before the opening of the School in September, on the studies of the preceding year.* They are held in the following order:—

At the End of the First Year.—Anatomy, Physiology, General Chemistry, † and Materia Medica.

End of Second Year.—Anatomy, Medical Chemistry, and Pathological Anatomy.

End of Third Year.—Therapeutics, Obstetrics, ‡ Theory and Practice of Medicine, and Surgery. ‡

End of Fourth Year.—Ophthalmology, Otology, Dermatology, Syphilis, Laryngology, Mental Diseases, Diseases of the Nervous System, Diseases of Women, Diseases of Children, Clinical and Operative Obstetrics, Clinical Medicine, Clinical and Operative Surgery and Legal Medicine.

In addition to the above written examinations each student is required to present a satisfactory report of the analysis of a solution containing inorganic substances, and of a specimen of urine, to examine and report upon a clinical case in Medicine and Surgery, and to take charge of and report upon three cases in Obstetrics; each student must also have satisfactorily dissected the three parts of the body.

Students attending the four years' course may be examined at the end of the third or fourth year, as preferred, in Clinical Medicine, Clinical Surgery, and Obstetrics. The examinations of the first two years are common to both groups of students. The final examinations at the close of the three years' course are in the following subjects: Therapeutics, Obstetrics, Surgery and Clinical Surgery, Theory and Practice, and Clinical Medicine.

* The June examination is for those only who are Members of the School at the time, and for those entitled to apply for the degree.

† See foot-note on page 213.

‡ The examinations in Obstetrics and Surgery may be passed at the end of the fourth year if preferred.

No student is allowed to anticipate the examinations in the regular course of studies of his year, except by special permission of the Faculty. Those who fail in any subject may again present themselves in that subject at the next regular examination.

All students are required to notify the Secretary in writing of their intention to present themselves for examination, either in June or September, one month before such examination is to be held.

The regular examinations for the year 1886-87 will begin June 13 and September 26.

The following was the order of the examinations held in June, 1886:—

Monday (June 7), Therapeutics; Tuesday, Ophthalmology, Otology, Laryngology, and Syphilis; Wednesday, Surgery; Thursday, Clinical and Operative Obstetrics, Diseases of Children, and Diseases of Women; Friday, Anatomy; Saturday, Obstetrics; Monday (June 14), Clinical Medicine; Tuesday, Dermatology, Operative Surgery, and Clinical Surgery; Wednesday, Medical Chemistry; Thursday, Diseases of the Nervous System, Mental Diseases, and Legal Medicine; Friday, General Chemistry; Saturday, Theory and Practice; Monday (June 21), Pathological Anatomy; Tuesday, Materia Medica; Wednesday, Advanced Anatomy; Thursday, Physiology.

DIVISION OF STUDENTS.

Students are divided into four classes, according to their time of study and proficiency, and during their last year will receive largely increased opportunities of instruction in the special branches mentioned. Students following the three years' course are classified as heretofore, and the instruction in the special branches is of the same character as that which has been given for several years. Students who began their professional studies elsewhere may be admitted to advanced standing; but all persons who apply for admission to the advanced classes must pass an examination in the branches already pursued by the class to which they seek admission, and furnish a satisfactory * certificate of time spent in medical studies. No student may advance with his class, or be admitted to advanced standing, until he has passed the required examinations in the studies of the previous year, or a majority of them; nor may he become a member of the third class, until he has passed all the examinations of the first, in addition to a majority of those of the second year.

In order that the time of study shall count as a full year, students of all classes must present themselves within the first week of the School year and register their names with the Secretary.

* Certificates from teachers who practise any peculiar or exclusive system of medicine are not accepted.

Students who do not intend to offer themselves for a degree will, however, be received for any portion of the course.

Any student may obtain a certificate of his period of connection with the School.

LIBRARIES.

The students have access, free of charge, to the books belonging to the library of the School and to the libraries of the several departments.

The College Library at Cambridge is open to the students of the medical School.

The Boston Public Library, which contains a large collection of medical books, is open to students who are inhabitants of Boston. Students, not inhabitants of Boston, who have filed a bond at the Treasurer's office, or deposited with the Treasurer the sum of fifty dollars, may also use this library.

REQUIREMENTS FOR THE DEGREE.

Every candidate must be twenty-one years of age, and of good moral character; must give evidence of having studied medicine three or four full years; have spent at least one continuous year at this School; have presented a satisfactory thesis; and have passed the required examinations.

The course of study recommended by the Faculty covers four years; but, until further notice, the Degree of Doctor of Medicine will be given as heretofore, upon the completion of three years of study, to applicants who have passed satisfactorily the above requirements.

The degree of Doctor of Medicine *cum laude* will be given to candidates who have pursued a complete four years' course, and obtained an average of seventy-five per cent* upon all the examinations above stated. A certificate of attendance on the studies of the fourth year will be given to such graduates as have attended the course, and have passed a satisfactory examination in the studies of the same.

Theses of conspicuous merit are mentioned with honor, or read at the University Commencement.

The degree of Master of Arts is open to graduates of the School who are also Bachelors of Arts of Harvard College, and to Bachelors of Arts of other Colleges who shall be recommended by the Faculty of Harvard College. Candidates must pursue an approved course of study in Medicine for at least one year after taking the degree of Doctor of Medicine. Students who have taken the four years' course, and have passed the examinations "with high credit," may obtain the degree of Master of Arts by presenting their applications to the Faculty on or before the first of June in the year of their final examinations.

* In computing averages all examinations will be reduced to a basis of three hours.

ANATOMICAL PRIZE.

Assistant Professor C. B. PORTER offers a prize of fifty dollars, open to all students, and graduates of not more than five years' standing, except teachers of anatomy, for the best dissection deserving the award illustrative of surgical anatomy, the specimen to be presented to the Museum.

PECUNIARY AID.

Four yearly scholarships, of the value of \$200 each, have been established by the Faculty, and are open to meritorious students who have been at the School for at least one year. The Barringer scholarships, of the value of \$300 and \$200 respectively, will be awarded to deserving students, preferably those of the fourth class. Only those needing assistance are expected to apply; and from such, those holding the highest rank will have the preference.

FEEES AND EXPENSES.

For matriculation, five dollars; for a year, two hundred dollars, (if in two payments, at the first, one hundred and twenty dollars; at the second, eighty dollars); for a half-year alone, one hundred and twenty dollars; for graduation, thirty dollars. During the first two years there are the following additional expenses: Two dollars for each of the three parts required for dissection; and six dollars per year for chemical material, in addition to the charge for breakage of glass apparatus. Of students who do not pay in advance, a bond for \$300, executed by two sufficient bondsmen, one of whom must be a citizen of the United States, is required. A copy of such bond will be sent, on application to the Secretary of the Faculty, and all students are recommended to deposit such a bond. The bond of the "American Surety Company," if made in a form that shall be satisfactory to the Treasurer of the College, will also be accepted. To students depositing bonds, term-bills will be presented one week before the end of the first term, to be paid within two weeks; and also one week or more before Commencement, to be paid on or before the beginning of the next academic year. Such students will be held responsible for the payment of fees until they have notified the Dean of their intention to withdraw from the School, and have subsequently received their bond from the Treasurer. No degree can be conferred till all dues to the School are discharged. The student's general expenses may be reduced, in accordance with his means, to the standard which prevails in other cities. The janitor of the Medical College will always have a list of boarding-houses in the vicinity of the College building, varying in their rates of charges from five to ten dollars a week.

COURSE OF STUDY FOR GRADUATES.

For the purpose of affording to those who are already graduates in medicine additional facilities for pursuing clinical, laboratory, and other studies, for which they had not previously found leisure, in such subjects as may especially interest them, and as a substitute in part for the opportunities heretofore sought in Europe, the Faculty have established a post-graduate course, of which the following is a programme. The fee in each branch is for a single half-year.

Anatomy. — Opportunities for advanced study and for special investigations. Fee, \$30.

Histology. — The various methods of examining the different tissues are employed, and opportunities for original research are offered. Fee, \$20.

Physiology. — Opportunities for original investigation in the Physiological Laboratory. Fee, \$30.

Medical Chemistry. — Practical instruction in the Chemical Laboratory, in the analysis of the urine and other animal fluids in health and disease, and of poisons; examination of blood-stains and other objects connected with medico-legal investigations, with the application of the microscope to these processes. General analysis, also, if desired. Laboratory-fee, \$30.

Hygiene. — Practical instruction in the Laboratory in the examination of water, air, articles of food and drink for the detection of adulteration, soils, etc., and opportunities for special work are offered. Laboratory-fee, \$25.

Pathological Anatomy. — Instruction in Pathological Histology and the examination of specimens in the Microscopical Laboratory. Practice in making post-mortem examinations. Fee, \$20.

Bacteriology. — Practical instruction in the Laboratory. Fee, \$15.

Surgery. — A practical course of operative surgery, and instruction in the application of bandages and apparatus. Fee, \$25.

Laryngology. Lectures and clinical exercises. Fee, \$20.

Ophthalmology. — Clinical instruction, lectures on diseases of the eye, and demonstrations of the methods of performing operations. Exercises in the use of the ophthalmoscope. Fee, \$25.

Otology. — Lectures and clinical instruction in diseases of the ear. Fee, \$15.

Dermatology. — Clinical instruction in diseases of the skin, illustrated by patients in this department of the Massachusetts General Hospital. Lectures. Fee, \$25.

Syphilis. — Clinical instruction at the Boston Dispensary. Fee, \$15.

Diseases of the Nervous System. — Lectures and practical instruction in the diagnosis and treatment of diseases of the nervous system. Fee, \$15.

Gynaecology. — Clinical instruction in diseases of women, and a practical course of operative gynaecology. Fee, \$25.

Obstetrics. — Cases supplied, and clinical instruction given. A course on operative obstetrics. Fee, \$25.

Diseases of Children. — Lectures and clinical instruction. Fee, \$25.


Those pursuing this course may elect the studies to which they will give their attention, and allot the time they will devote to each. They will be exempt, unless at their option, from examinations, and may obtain a certificate of attendance on this course of advanced study. On payment of the full fee for the course, they will have the privilege of attending any of the other exercises of the Medical School, the use of its laboratories and library, and all other rights accorded by the University.

Graduates of other medical schools may obtain the degree of M.D. at this University, after a year's study in the graduates' course. The required examinations are those of the three years' course, and may be passed in such order as is desired, but only at the stated seasons.

The fee for a year is	\$200
“ for a half-year	\$120

For any of the special courses, such fees as are above specified.

For further information or catalogue, address Dr. H. P. BOWDITCH, Dean, Harvard Medical School, Boston, Mass.

 The Medical School is on Boylston Street, Boston.

BOYLSTON MEDICAL PRIZES.

These prizes, open to public competition, are offered annually for the best dissertations on questions in medical science proposed by the Boylston Medical Committee.

For 1887 two prizes are offered : —

1. A prize of two hundred dollars for the best dissertation on *The Identification of Human Blood in Suspected Stains*.

2. A prize of two hundred dollars for the best dissertation on *Original Investigations on the Pathology of so-called Uraemic Symptoms*.

Dissertations on these subjects must be sent post-paid to W. F. WHITNEY, M.D., Harvard Medical School, Boston, Mass., on or before *Wednesday, April 6, 1887*.

For 1888 two prizes are offered : —

1. A prize of four hundred and fifty dollars for the best dissertation embodying *The Result of Original Work in Anatomy, Physiology or Pathology*. The subject to be chosen by the writer.

2. A prize of one hundred and fifty dollars for the best dissertation on *Pneumonia in its Relation to Affections of the Nervous System*.

Dissertations on these subjects must be sent to the same address as above on or before *Wednesday, April 4, 1888*.

In awarding these prizes preference will be given to dissertations which exhibit original work, but if no dissertation is considered worthy of a prize, the award may be withheld.

Each dissertation must bear in place of its author's name some sentence or device and must be accompanied by a sealed packet bearing the same sentence or device and containing within the author's name and residence. *Any clew by which the authorship of a dissertation is made known to the committee will debar such dissertation from competition.*

Dissertations must be written in a distinct and plain hand, and their pages must be bound in book form.

All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, with the sealed packet unopened, if called for within one year after they have been received.

By an order adopted in 1826, the Secretary was directed to publish annually the following votes:—

1. That the Board do not consider themselves as approving the doctrines contained in any of the dissertations to which premiums may be adjudged.

2. That in case of publication of a successful dissertation, the author be considered as bound to print the above vote in connection therewith.

The Boylston Medical Committee is appointed by the President and Fellows, and consists of the following physicians: — GUSTAVUS HAY, M.D., *President*, ROBERT T. EDES, M.D., SAMUEL G. WEBBER, M.D., H. P. BOWDITCH, M.D., FRANK W. DRAPER, M.D., J. COLLINS WARREN, M.D., EDWARD S. WOOD, M.D., WILLIAM F. WHITNEY, M.D., *Secretary*, F. H. WILLIAMS, M.D.

The address of the *Secretary* is WILLIAM F. WHITNEY, M.D., Harvard Medical School, Boston, Mass.

AWARD OF PRIZES IN 1886.

At the annual meeting of the Committee for 1886 it was voted that a prize of two hundred dollars be awarded to CHARLES F. WITHINGTON, M.D., of Roxbury, Mass., for a dissertation on *The Relation of Hospitals to Medical Education*.

No prize was awarded for any dissertation on the question, *Influence of the Soil as a Factor in the Causation and Spread of Typhoid Fever*.

EXAMINATION PAPERS.

(June Examination, 1886.)

First Year's Studies.

ANATOMY. — Professor DWIGHT.

1. Describe the ossification of the femur. Where is the nutrient foramen and what is its direction? What points of difference between the outer and inner condyles? How do you distinguish a femur of a man from one of a woman?
 2. Describe the junction of the frontal with other bones.
 3. Describe the different kinds of epithelium. Where does ciliated epithelium occur in the human body?
 4. What arteries supply (1) the stomach, (2) the rectum, (3) the spinal cord, (4) the knee-joint? State from what main artery they come and give a short account of the distribution in the parts mentioned.
 5. Describe the third ventricle of the brain.
 6. Describe the membranes of the central nervous system. Do they differ at all in the skull and in the spine? If so, how?
 7. Describe the development of the amnion.
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PHYSIOLOGY. — Professor BOWDITCH.

[Number the answers to the questions without copying the questions themselves. Do not number the pages of the book. Answer the questions in order, writing on each page in succession.]

1. Define potential energy, and illustrate by physiological examples.
2. How does the application of heat, as in cooking, affect the digestibility of meat?
3. What is the physiological action of "relishes" or "condiments"?
4. Describe the variations in the rapidity of the blood in different parts of the circulatory system.
5. How do the respiratory movements affect the blood-tension?
6. Point out resemblances between blood and muscular tissue.
7. What evidence is there of the importance of the muscular system in the heat-production of the body?
8. Describe the resemblance and the difference between a muscle and a steam engine regarded as machines for performing mechanical work.
9. What is the normal range of temperature in the human body?
10. How is the rapidity of transmission of nerve force estimated?
11. What is the effect of section of the posterior spinal nerve roots?

12. What is meant by the "specific energy of nerves"? Illustrate by examples drawn from the sense of touch.
13. What is the function of the tubercula quadrigemina?
14. Why is it necessary for the body to absorb oxygen from the air.
15. What is the "respiratory quotient," and how is it affected by diet?
16. Why is the air of a crowded room unfitted for respiration?
17. Mention the excreting organs of the body in the order of their importance.
18. Explain myopia and hypermetropia, and give a diagram showing the course of the rays of light.
19. How do we obtain through the eye the idea of distance?
20. What is the origin and destiny of liver-sugar?

GENERAL CHEMISTRY. — Assistant Professor HILLS.

[Answer the questions in order, writing on each page in succession.]

1. State and illustrate the law of definite proportions. Define a normal salt. An acid salt. Give examples.
2. What are isomeric compounds? How is the phenomenon of isomerism explained? Illustrate.
3. Show by structural formulæ the relation between the second member of the marsh gas series of hydrocarbons (C_2H_6), ethyl alcohol, acetic acid, and ethyl ether.
4. Sources of carbon monoxide (carbonic oxide)? Describe its properties.
5. To what class of organic compounds does glycerine belong? In what substances is it found, and in what form does it exist in these substances? How obtained? What is formed when the glycerine is set free?
6. The tests for grape sugar? Starch?
7. State the general principle of volumetric quantitative analysis. Describe the process for the volumetric determination of chlorine.
8. State the chief peculiarities of the alkaloids, as a class.
- *9. Properties of iodine.
10. Phosphorus.
11. Potassium chlorate.
12. Corrosive sublimate.
13. Ether.
14. Chloral hydrate.

* In answering questions 9 to 13 inclusive, follow, without any deviation, the following order:—

1. Physical state, i. e. solid, liquid, or gas. 2. Color, odor, taste. 3. Crystalline form, if any. 4. Volatile or non-volatile. 5. Solubility in water. Solubility in other solvents, if important. 6. Action on the system, so far as you have been told. 7. Any characteristic chemical property (not the chemical tests). 8. Anything else of importance which occurs to you.

15. Oxalic acid.
16. Iodoform.
17. Carbolic acid.
18. Tannic acid.
19. From what are the substances, named in questions 16, 17, and 18, obtained, and for what are they used?
20. Name, as near as possible, the substances on your desk?

MATERIA MEDICA.—Assistant Professor F. H. WILLIAMS.

1. Give the composition and doses of:—
Compound jalap powder, powder of ipecac and opium, compound cathartic pill, compound powder of morphine, compound powder of glycyrrhiza. What is a prescription?
2. What are officinal preparations?
Define the following pharmaceutical preparations:—
Suppositories, ointments, tinctures, extracts, pills, mixtures.
3. Doses and solubility in water of salicylate of sodium, bicarbonate of sodium, corrosive sublimate, calomel, sulphate of magnesia, chloral, phosphate of sodium, gallic acid, subnitrate of bismuth, castor oil.
4. Mention two preparations of cinchona with doses.
Mention four preparations of opium with doses.
Mention three preparations of rhubarb with doses.
Mention one preparation of podophyllum with dose.
5. How does deodorized tincture of opium differ from laudanum?
Mention three compounds of potassium, two compounds of ammonium, and two compounds of iodine, with doses.
6. What are the active principles of:—
Belladonna, jalap, nux vomica, galla, aspidium, digitalis, erythroxyton?
7. Mention two of the useful alkaloids of opium.
Write a prescription for pepsin.
How would you give caffeine? Pepo?
8. Write two prescriptions for an emetic, one of them for hypodermic injection with directions.
9. Write three prescriptions for iron.
Write two prescriptions for digitalis.
10. Write one prescription for ergot.
Write three prescriptions for mercury, one of them for external use.

Second Year's Studies.

MEDICAL CHEMISTRY.—Professor Wood.

1. What abnormal coloring matters may be present in the urine, what color may they impart to the urine, and how can they be detected in the urine?

2. Under what circumstances may the daily amount of urine be increased for a long time?
3. Method of estimating the amount of sugar quantitatively?
4. What is the amount of albumen in the urine in the different organic diseases of the kidneys?
5. What is the character of the urine and urinary sediment in chronic pyelitis? In chronic prostatitis? 6. In chronic diffuse nephritis? 7. In oxaluria?
8. What inferences can be drawn from urine having the following characteristics? Why?

Normal. Acid. Sp. Gr. = 1019. Considerable sediment.

Uph. = n. \bar{U} . = n. Cl. = n. E. P. = n.

Ind = n. \bar{U} . = +. Sf. = n. A. P. = —.

Large trace of albumen. Bile and sugar absent.

Sediment = Renal epithelial cells, some of which are fatty; hyaline and granular casts, some of which have oil globules adherent; an occasional epithelial and fatty cast; an occasional blood globule, both free and adherent to some of the casts.

Total amount of urine = 1200 cub. cent.

“ “ “ urea = 25.00 gm.

“ “ “ chlorine = 4.60 “

“ “ “ P_2O_5 = 2.15 “

“ “ “ albumen = 2.40 “

9. How distinguish easily and quickly between arsenic and subnitrate of bismuth? Between oxalic acid and sulphate of magnesium? Between corrosive sublimate and sugar of lead?

10. Symptoms of cyanide of potassium poisoning? 11. Of digitalis poisoning?

12. Describe a case of strychnine poisoning.

PATHOLOGICAL ANATOMY. — Professor FITZ.

1. State the usual tests for amyloid degeneration, and what is their relative value.
2. Describe the gross appearances and the microscopical characteristics of a coagulation necrosis.
3. State the relation between gangrene and inflammation.
4. Discriminate between pyæmia and septicæmia.
5. Enumerate the lesions of the brain and its membranes which may result from syphilis.
6. Describe the appearances suggestive of miliary aneurisms of the brain.
7. Describe the appearances of a hypertrophied heart, and enumerate its causes.
8. State the relative frequency of chronic pulmonary endocarditis, and the circumstances under which it may occur.

9. Describe the changes in the lungs which may be found in chronic pulmonary tuberculosis.
10. State the anatomical changes which suggest that acute pneumonia may be an infective disease.
11. State the causes of an acute, diffuse peritonitis.
12. Enumerate the causes of intestinal obstruction to be found in the lower, right, abdominal quadrant.
13. Describe the alterations of the alimentary canal which may occur in leucæmia.
14. State the circumstances under which chronic interstitial hepatitis may occur.
15. Describe the appearances and results of an acute pylephlebitis.
16. Describe the appearance of the spleen in acute pernicious anæmia.
17. State where a dislocated kidney may be found.
18. Enumerate the local causes of thrombosis of the renal vein.
19. Describe the deformities of the uterus which may result from uterine fibro-myomata.
20. Describe the appearances of chronic salpingitis.

TOPOGRAPHICAL ANATOMY. — Professor DWIGHT.

1. Describe the circulation of the orbit, including that of the eye-ball.
2. Describe the rectum, including the anus, and its relations in the male.
(Answer the following questions as briefly as possible.)
3. Describe the synovial sheaths of the front of the wrist and hand.
4. How far is the tip of the uvula from the epiglottis, the mouth being closed?
5. If the hard palate were prolonged backward, which vertebra would it strike?
6. How far down the throat can one reach with the finger?
7. Where should a line be drawn on the chest to represent the course of the internal mammary artery?
8. In what positions of the joint are the crucial ligaments of the knee tense? (Considering only flexion and extension.)
9. The relations of the popliteal artery to the vein and nerve. Opposite what point on the surface does it divide?
10. What muscles assist in maintaining the arches of the foot, and how?

Third Year's Studies.

THERAPEUTICS. — Assistant Professor F. H. WILLIAMS.

Say what you mean clearly and only once. — Use the metric system.

Suppose that you have under your care the family of a gentleman who is not a practising physician, but who is thoroughly educated in

physiology and chemistry, insists on having a reason for all you do, and is peculiarly averse to vague and unmeaning phrases.

Explain as you would to him the details of, and REASONS for, your treatment of the following cases: —

1. His wife is emaciated and dyspeptic, and you use a nutritious diet, digestives, and tonics. You are obliged for a time to feed by the rectum.
2. His daughter, aged fifteen, has acute rheumatism, for which you administer some salicyl compounds and alkalis.
3. Notwithstanding this, she is found to have valvular disease of the heart, for which you give digitalis or some allied drug.
4. He himself has sciatica, and you clear out the large intestine and use external applications,
5. But are finally compelled to resort to morphine, bromides, chloral, and some of the more recent hypnotics, to relieve pain and sleeplessness.

OBSTETRICS. — Professor W. L. RICHARDSON.

1. Give the diameters of the pelvic brim. Why does the head usually enter the pelvis in one of the oblique diameters?
2. The significance of nausea and vomiting during pregnancy, and also during labor.
3. What is the origin of a caput succedaneum? If present, where would it be found in a face presentation — mentum left posterior?
4. Treatment of occipito-posterior positions.
5. Describe in detail the operation of internal version.
6. Causes and treatment of post-partum hæmorrhage.
7. Prevention and treatment of puerperal septicæmia.
8. Management of a case of labor in twin pregnancy.
9. The varieties, causes and symptoms of placenta prævia. The treatment of a case of complete placenta prævia.
10. A multipara, five and a half months pregnant, slips on getting out of a carriage. Soon after she complains of intermitting pains, accompanied by nausea. There is no hæmorrhage. A vaginal examination detects a slight dilatation of the os uteri. Treatment and prognosis.

SURGERY. — Professor CHEEVER.

1. Urinary extravasation; causes; symptoms; treatments.
2. Ulceration and mortification.
3. Abscess under the fascia lata.
4. Outlines of the germ theory.
5. Acute ostitis.
6. Erysipelas.
7. Fracture of the ribs and occasional sequelæ.

8. Rodent ulcer, its nature, diagnosis and treatment.
 9. Coma from head injury; enumerate causes which produce it.
 10. Peri-typhlitis, and peri-nephritic abscess.
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CLINICAL SURGERY.—Assistant Professor PORTER.

I. A young and healthy woman aged 27 is thrown from a carriage and sustains a compound fracture at middle of right leg. The upper fragment protrudes one inch through a wound just large enough to admit the passage of the bone. Six hours after injury there is marked tension of the skin from venous hemorrhage. Both the dorsalis pedis and posterior tibial behind the heel pulsate.

- a. What are the indications for treatment?
- b. Would you amputate or not?
- c. Give the reasons for your decision.
- d. State complications liable to arise and how you would meet them.
- e. Prognosis.

II. a. What are the causes of fracture of patella?

- b. What complications may arise and how would you treat them?
- c. How soon would you allow passive motion and to what extent?
- d. What is the prognosis as to *duration of confinement, strength of limb, and mobility of joint?*

III. A healthy vigorous young man has a decided case of gonorrhœa.

- a. What symptoms would you expect him to complain of?
 - b. What complications may arise from extension to deeper parts?
 - c. How would you treat the various conditions?
 - d. What is your prognosis?
-

THEORY AND PRACTICE.—Professor MINOT.

1. Give an account of the symptoms, diagnosis, and treatment of gastric ulcer.
2. What indications does the tongue furnish for the diagnosis of disease?
3. Give the general and special treatment of pulmonary consumption.
4. What is the nature of hepatic colic, and its treatment?
5. Give the principal symptoms of locomotor ataxia.
6. Give the symptoms, course, and prognosis of infantile paralysis.
7. What are the chief characteristics of cardiac disease in infancy and childhood?
8. Describe the principal intestinal parasites in children, with their symptoms and treatment.

CLINICAL MEDICINE.

Professor EDES and Assistant Professor WHITTIER.

CASE 1. — A middle-aged woman "took cold" on Saturday and was afterward distressed for breath. She was seen on Tuesday evening sitting up, breathing with some difficulty, and with a wheeze, chiefly with expiration. The face was red but not livid. She complained of pain at the top of the sternum and side of the throat. There was expectoration of white frothy mucus and some tough brown masses. The voice was suppressed. The tonsils were not swollen, there was no exudation in the pharynx, and the epiglottis was not swollen. The pulse was rapid. The physical signs were negative with the exception of prolonged expiration.

Diagnosis, prognosis, and treatment?

CASE 2. — A lady, 46 years of age, of average health, was aroused at night by chilly sensations and by pain along the margin of the sternum, extending into the mammary region of the right side; later in the night chilly sensations returned, and afterwards some fever and thirst. The next morning there was slight cough with scanty expectoration tinged with blood; two sputa only were seen. The pain yielded to mild counter-irritants, the fever subsided, and on the third day the patient was quitewell, complaining only of a feeling of constriction in chest.

During this night there was, without previous symptoms, severe lancinating pain in right mammary region, extending to axilla; great difficulty in breathing and signs of much prostration. Cough was rendered impossible by pain in side. Expectoration was absent. Morning examination gave Temp. 102° ; Resp. 36, and largely abdominal; Pulse, 108. The physical signs were, feeble respiratory murmur in right lower lobe in axillary region; rales of both sub-crepitant and crepitant varieties, and indistinct areas of diminished pulmonary resonance with slight modifications of voice. Palpation gave somewhat increased vocal fremitus. Slowly and during three days the physical signs increased, until the larger part of the lower right chest, posterior to the axillary region, was the seat of indistinctly marked areas of diminished resonance. Cough was scanty and expectoration very slight, and without distinctive characteristics.

On the ninth day the temperature fell from 103° (evening) to $99^{\circ}5$. Resp. to 28, and pulse to 96. Coarse mucous rales could be heard over the affected portion of lung and expectoration became muco-purulent. During the days following and up to the 16th convalescence was rapid and satisfactory; and on the 24th day the only physical signs indicative of intra thoracic disturbance were respiratory murmur less distinct, and occasional mucous rales in lower right lobe behind.

CASE 3. — A middle-aged man was seen writhing in intense pain referred to the epigastrium. Vomiting of greenish fluid took place, there were loose discharges from the bowels, small in amount. This state of things lasted with only short remissions for two days, until a small dose of morphia which, for special reasons, had been hitherto withheld though asked for, was administered, after which there was complete relief for many days. The pupils were dilated, the pulse regular and of normal character. Nothing special had been eaten or drunk to cause irritation of the stomach. The abdominal walls were neither distended nor retracted, no intra-abdominal tumour was to be detected, nor was there excessive tenderness on pres-

sure. It was afterwards learned that he had had several such attacks, that for many months or years his legs had been weak, that he had had neuralgia and numbness in them, that he stumbled in walking and staggered with his eyes shut.

What further examinations should be made?

What was the nature of the acute attack?

Diagnosis, prognosis, and treatment?

CASE 4. — A child, seven years of age, of healthy parentage, had made frequent complaint of pain in the left side of abdomen, and was found by her mother to be rapidly losing flesh and strength. There was also an account of quite frequent voiding of high-colored urine, with a brownish sediment.

After several weeks, the emaciation progressing, the mother noticed that the left side of the abdomen was larger than the right; that there was pain and tenderness on pressure, and that periods of "constipation" occurred, followed by the escape of large quantities of semi-liquid faeces, without much change in the size of abdomen, or relief to the pain and tenderness in left lumbar region.

About this time the patient was taken to a physician, who confirmed the mother's observation of loss of flesh and strength, for the child was pale or sallow, emaciated and extremely weak. In the left lumbar region a mass, irregular in outline and surface, painful on palpation, extended into the umbilical region and upwards to the margin of ribs in front; percussion gave intestinal resonance from above downwards over the central portion of the tumor.

A specimen of urine gave: Reaction, acid; Sp. Gr. 1014; Sediment brownish, and consisting of blood and brown granular matter; there were no casts, and the quantity of albumen present was small.

The subsequent history of this case was that of large amount of constitutional disturbance, apparently coincident with rapid growth of the mass in left lumbar region. No other organs or parts were found at any time to be the seat of disease and death took place at the end of the third month.

Fourth Year's Studies.

OPERATIVE SURGERY. — Assistant Professor PORTER.

1. Describe the operation for ligature of the ulnar artery high.
2. Ligature of the brachial at bend of elbow.
3. Ligature of the femoral at Hunter's canal.
4. Ligature of the lingual.
5. Ligature of the dorsalis pedis.
6. Describe the operation for exsection of lower jaw.
7. Describe the operation for exsection of knee joint.
8. Describe amputation of fore-arm by skin flaps.
9. Describe amputation of leg by circular method.
10. Describe amputation of penis.

CLINICAL AND OPERATIVE OBSTETRICS.

Professor W. L. RICHARDSON.

1. Anæsthetics in labor.
 2. Use of antiseptics in obstetric practice.
 3. Selection of a wet nurse.
 4. Prevention and treatment of sore nipples.
 5. Breech case. The presenting part has reached the perineum. Immediate delivery is required. Describe in detail the operation.
-

OPHTHALMOLOGY. — Professor WILLIAMS.

1. What are the symptoms of catarrhal conjunctivitis?
 2. How may syphilis affect the eyes of children or adults?
 3. What internal ocular lesions may result from a sharp blow on the eyeball?
 4. What are the symptoms and treatment of ulcerations of the cornea in children?
 5. What are the symptoms and treatment of loss of accommodation in the eyes?
-

DERMATOLOGY. — Professor WHITE.

1. Varieties of erythema multiforme.
 2. Treatment of the several varieties of eczema.
 3. Nature and treatment of keratosis senilis.
 4. Causes of alopecia.
 5. Changes in cutaneous tissues due to the presence of bacilli.
-

GYNAECOLOGY. — Assistant Professor BAKER.

1. State what you can about the development of the genital tract, i. e. Fallopian tubes, uterus, and vagina, during fœtal life, and state what changes occur from birth to puberty; also the malformations arising from defects in fœtal development.¹
2. Give some of the principal causes of uterine displacements.
3. Describe the operation in a case of simple vesico-vaginal fistula, and the after treatment.

¹ Diagrams may be used to illustrate, and will be received in place of technical terms for the malformations.

DISEASES OF CHILDREN.—Dr. ROTCH.

1. Describe the chief points in the development of the infant during its first two years of life.
 2. Malaria in infancy and childhood; its peculiar symptoms.
 3. Typhoid fever in infancy and childhood; differential diagnosis; how does it differ from typhoid in the adult?
-

DISEASES OF THE NERVOUS SYSTEM.—Dr. PUTNAM.

It will be sufficient to have answered four questions.

1. What morbid conditions of the nervous system (functional or organic) might give rise to "numbness and prickling" of the extremities:
 - a. without discoverable loss of sensibility;
 - b. with loss of sensibility?
 2. What conditions of the nervous system might give rise to hemi-anæsthesia, either with or without involvement of the special senses?
 3. What conditions might give rise to changes in the rate, rhythm or tension of the pulse?
 4. What are the symptoms of chronic lead-poisoning? (Give as many symptoms as you can remember.)
 5. To what symptoms does disease of the anterior cornua of the spinal cord (acute, sub-acute or chronic) give rise?
 6. What are the earliest signs of locomotor ataxia?
 7. What are the causes, and prognosis, of the different varieties of facial paralysis?
 8. In what ways does syphilis affect the nervous system?
 9. What is the diagnostic value of
 - a. increased knee-jerk (with and without ankle-clonus)?
 - b. diminished knee-jerk?
-

MENTAL DISEASES.—Assistant Professor FOLSOM.

1. State the main points of difference between the states of mental defect and degeneration and the other mental diseases.
2. What is the insane temperament?
3. What is moral insanity?
4. What is dipsomania?
5. What is kleptomania?
6. What are the several forms of epileptic insanity?
7. What is melancholia?
8. What is acute mania?
9. Give the clinical history of a case of general paralysis?

LARYNGOLOGY. — Assistant Professor KNIGHT.

1. Principal causes of "mouth-breathing"; its ill effects and methods of cure.
 2. Nature, causes, diagnosis, prognosis and treatment (including hygienic) of chronic catarrhal laryngitis.
 3. Nervous or functional aphonia. Laryngoscopic appearances. Treatment.
 4. Recent theories and methods of treatment of so-called "hay-fever."
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OTOLOGY. — Drs. GREEN AND BLAKE.

1. Describe the mastoid process; its anatomical structure and topographical relations.
 2. Describe a simple (uncomplicated) purulent inflammation of the tympanum; its pathology, usual course, diagnosis and treatment.
 3. What are the different methods of inflation of the tympanum?
 4. Name the more common diseases of the auricle and external auditory canal.
 5. For what purpose would you perform paracentesis of the membrana tympani and what portion of the membrane would you preferably select for puncture?
-

LEGAL MEDICINE. — Assistant Professor DRAPER.

1. What is the difference between rape and defloration?
 2. Describe the two chemical tests which you regard as the best for the demonstration of blood in suspected stains.
 3. What are the anatomical proofs of a recent abortion, instrumentally induced, at the end of the fourth month of pregnancy?
 4. What conditions of the lungs of a still-born child interfere with the value and reliability of the hydrostatic test?
 5. What are the details, in brief, of a medico-legal autopsy of the body of a person supposed to have died by poison?
 6. Give some examples of death by asphyxia, the result of violence.
-

VENEREAL DISEASES. — Dr. GREENOUGH.

I.

What condition of the inguinal lymphatic glands would you expect to find in —

- a. A case of gonorrhoea?
- b. A case of chancroid?
- c. A case of primary syphilitic lesion?
- d. What condition of these glands might you find in these three diseases?

II.

- a.* Describe the appearance of some of the most common forms of primary syphilitic lesions.
- b.* Describe a typical chancroid.
- c.* Give the differential diagnosis between these two lesions.

III.

What are the indications for putting a patient, who has a sore on the penis, following a suspicious coitus, on specific constitutional treatment?

IV.

Being consulted by a patient who has an inflammatory phimosis (that is, having a long prepuce which owing to acute inflammation cannot be retracted), with a purulent discharge, what investigations would you make to determine his trouble?

V.

- a.* Describe the appearance of a squamous syphilitic eruption.
- b.* Give the differential diagnosis between this cutaneous eruption and a case of psoriasis vulgaris.

ADMISSION EXAMINATION PAPERS.

LATIN.

TRANSLATE: —

Fabricii virtutem admiratus Pyrrhus, illum secreto invitavit, ut patriam desereret, secumque vellet vivere, quartâ etiam regni sui parte oblatâ; cui Fabricius respondit: “Si me virum bonum judicas, cur me vis corrumpere? sin vero malum, cur me ambis?” Anno interjecto, omni spe pacis inter Pyrrhum et Romanos conciliandae abeatâ, Fabricius consul factus contra eum missus est. Quumque vicina castra ipse et rex haberent, medicus regis nocte ad Fabricium venit, eique pollicitus est, si prae-mium sibi proposuisut, se Pyrrhum reneno necaturum. Hunc Fabricius vinctum reduci jussit ad dominum, et Pyrrho dici, quae contra caput ejus medicus spondisset. Tunc rex admiratus eum dixisse fertur: “Ille est Fabricius, qui difficilius ab honestate, quam sol a suo cursu possit averti.”

FRENCH.

LE CORBEAU ET LE RENARD.

Maitre corbeau, sur un arbre perché,

Tenait en son bec un fromage.

Maître renard, par l'odeur alléché,

Lui tint à peu près ce langage :

Hé! bonjour, monsieur du corbeau!

Que vous êtes joli! que vous me semblez beau!

Sans mentir, si votre ramage

Se rapporte à votre plumage,

Vous êtes le phénix des hôtes de ces bois.

A ces mots, le corbeau ne se sent pas de joie;

Et pour montrer sa belle voix,

Il ouvre un large bec, laisse tomber sa proie.

LE MARQUIS DE CUSTINE À LA DOUANE DE PETERSBOURG.

Que venez-vous faire en Russie?

— Voir le pays.

Qui comptez-vous voir à Pétersbourg?

— Toutes les personnes qui me permettront de faire connaissance avec elles.

Combien de temps comptez-vous rester en Russie?

— Je ne sais.

Dites à peu près? — Quelques mois.

Avez-vous une mission diplomatique? — Non.

Quelque but scientifique? — Non.

Êtes-vous envoyé par votre gouvernement pour observer l'état social et politique de ce pays? — Non.

Par une société commerciale? — Non.

Vous voyagez donc librement et par pure curiosité?

— Oui.

Pourquoi vous êtes-vous dirigé vers la Russie?

— Je ne sais.

Avez-vous des lettres de recommandation pour quelques personnes de ce pays?

GERMAN.

TRANSLATE:—

In einer Gegend des Harzes wohnte ein Ritter, den man gewöhnlich nur den blonden Eckbert nannte. Er war ungefähr vierzig Jahre alt, kaum von mittler Grösse, und kurze, hellblonde Haare lagen schlicht¹ und dicht an seinem blassen, eingefallenen Gesichte. Er lebte sehr ruhig für sich und war niemals in die Fehden² seiner Nachbarn verwickelt; auch sah man ihn nur selten ausserhalb der Ringmauern seines kleinen Schlosses. Sein Weib liebte die Einsamkeit eben so sehr, und beide schienen sich von Herzen zu lieben; nur klagten sie oft darüber, dass der Himmel ihre Ehe mit keinen Kindern segnen wolle.

Nur selten war Eckbert von Gästen besucht, und wenn es auch geschah, so wurde ihretwegen fast nichts in dem gewöhnlichen Gange des Lebens geändert, die Mässigkeit³ wohnte dort und die Sparsamkeit selbst schien alles anzuordnen. Eckbert war alsdann heiter und aufgeräumt,⁴ nur wenn er allein war, bemerkte man an ihm eine gewisse Verslossenheit,⁵ eine stille zurückhaltende Melancholie

¹ smooth. ² quarrels. ³ temperance. ⁴ in good spirits, lively. ⁵ reserve.

PHYSICS.

1. What is meant by the spheroidal state of a liquid? Explain it.
2. Define velocity. Unit of velocity?
3. Describe the dispersion of light by a prism.
4. Ductility and malleability?
5. Describe the telescope briefly.
6. Atomic heat of bodies?
7. Equality of pressure in liquids? Illustrate.
8. Distillation of liquids?
9. Principle of the electric telegraph?
10. Ruhmkorff's coil?

GEOMETRY.

- I. Define a point, a broken line, a curved surface.
- II. What is an acute angle; what is the complement of an angle; what are vertical angles?
- III. Of two oblique lines drawn from the same point in a perpendicular, cutting off unequal distances from the foot of the perpendicular, the more remote is the greater.
- IV. Two parallel lines are everywhere equally distant from each other.
- V. If two angles of a triangle be equal, the sides opposite the equal angles are equal and the triangle is isosceles.
- VI. A straight line perpendicular to a radius at its extremity is a tangent to the circle.

ALGEBRA.

(Leave all the work.)

1. The sum of the ages of two boys is 21 years, and the age of the older is twice that of the younger; what is the age of each?
2. Add
 $x^3 + ax^2 + bx + 2$, $3x^3 - 4ax^2 - 6bxy + 7$ and $3x^3 - 3ax^2 - 7bx - 19$.
3. Find the sum of
 $2(x-y)^2$, $3(x-y)^2$, $(x-y)^2$, $-(x-y)^2 + (x+y)$ and $(x+y)$.
4. Find the sum of $ax^2 + bx$ and $cx^2 - dx$.
5. From $3a(a-y) + 4by + a^3$, take $2a(a-y) - 7by - 4a^3$.
6. Multiply $(a+b)^m$ by $(a+b)^3$.
7. Require the product of $x^2 + y$ and $x^2 + y$.
8. Find the value of the expression $(a^n + b^n)(a - b)$.
9. Divide $15a^{-2}b^3x - 10abx - 5ab^2x$ by $5ab^2x$.
10. A sum of money was divided equally among a certain number of persons; had there been three more, each would have received \$1 less, and had there been two few, each would have received \$1 more. How many persons, and what sum did each receive?

BOTANY.—Professor EDES.

1. With how many species of wild flowers in your own neighborhood are you familiar?

Mention the botanical names and families of two or three peculiar to that neighborhood and ten (10) which are widely distributed through the United States.

2. Mention and describe some of the important plants (not necessarily indigenous) in the following orders:—

- | | |
|-----------------------|---------------------|
| (1) Ranunculaceae, | (11) Labiatae, |
| (2) Cruciferae, | (12) Orchidaceae, |
| (3) Leguminosae, | (13) Liliaceae, |
| (4) Rosaceae, | (14) Melanthaceae, |
| (5) Umbelliferae, | (15) Coniferae, |
| (6) Rubiaceae, | (16) Euphorbiaceae, |
| (7) Compositae, | (17) Gramineae, |
| (8) Ericaceae, | (18) Filices, |
| (9) Scrophulariaceae, | (19) Fungi, |
| (10) Lauraceae, | (20) Algae. |

3. Describe the parts of a flower and their uses.

4. Describe the process of fertilization in plants.

- | | |
|-------------------|-------------------|
| (a) Phaenogamous, | (b) Cryptogamous. |
|-------------------|-------------------|



