1890

University of Vermont, College of Medicine Bulletin

University of Vermont

Follow this and additional works at: https://scholarworks.uvm.edu/dmlcatalog

Part of the Medicine and Health Sciences Commons

Recommended Citation
University of Vermont, "University of Vermont, College of Medicine Bulletin" (1890). University of Vermont College of Medicine Catalogs. 40.
https://scholarworks.uvm.edu/dmlcatalog/40

This Book is brought to you for free and open access by the University Libraries at ScholarWorks @ UVM. It has been accepted for inclusion in University of Vermont College of Medicine Catalogs by an authorized administrator of ScholarWorks @ UVM. For more information, please contact donna.omalley@uvm.edu.
THIRTY-SEVENTH
ANNUAL ANNOUNCEMENT
OF THE
MEDICAL DEPARTMENT

UNIVERSITY
OF
VERMONT

1890

BURLINGTON, VERMONT.
DESCRIPTION OF THE FLOOR PLANS OF THE NEW COLLEGE BUILDING.

FIRST FLOOR PLAN.
A. Office.
B. Students' Cloak Room and Post Office.
C. Museum.
D. Main Entrance.
E. E.E. Janitor's Apartments.
F. Private Entrance and to the Dissecting Room.
L. Elevator.

SECOND FLOOR PLAN.
G. Private Room for Prof. of Surgery and Prof. of Obstetrics.
F. Private Room for Prof. of Theory and Practice of Medicine.
H. Materia Medica and Physiology Room.
I. Chemical Laboratory.
R. Amphitheatre.
M. Rooms for Laboratory Instruction.
L. Elevator.

DISSECTING ROOM PLAN.
L. Elevator to Dissecting Room.
S. Private Dissecting Room for Prof. of Anatomy.
T. Dissecting Tables for Students.
THIRTY-SEVENTH

ANNUAL ANNOUNCEMENT

OF THE

MEDICAL DEPARTMENT

(ORGANIZED IN 1824.)

OF THE

UNIVERSITY OF VERMONT

AND

STATE AGRICULTURAL COLLEGE,

(ORGANIZED IN 1791.)

Burlington, Vermont.

FOR THE YEAR 1890.

BURLINGTON, VT.:
FREE PRESS ASSOCIATION.
1889.
FACULTY OF MEDICINE.

MATTHEW HENRY BUCKHAM, D. D.,
BURLINGTON, Vt., President.

JOHN ORDRONAUX, M. D., LL. D.,
NEW YORK CITY,
Emeritus Professor of Medical Jurisprudence.

J. WILLISTON WRIGHT, A. M., M. D.,
NEW YORK CITY,
Emeritus Professor of the Principles and Practice of Surgery.

ALBERT F. A. KING, A. M., M. D.,
WASHINGTON, D. C.,
Professor of Obstetrics and Diseases of Women.

ASHBEL PARMELEE GRINNELL, M. D.,
BURLINGTON, Vt.,
Professor of the Theory and Practice of Medicine;
Attending Physician to Mary Fletcher Hospital,
and Dean of the Faculty.

RUDOLPH AUGUST WITTHAUS, A. B., M. D.,
NEW YORK CITY,
Professor of Chemistry and Toxicology.

J. HENRY JACKSON, A. M., M. D.,
BARRE, Vt.,
Professor of Physiology and Microscopic Anatomy.

WILLIAM B. TOWLES, M. D.,
UNIVERSITY OF VIRGINIA,
Professor of General and Special Anatomy.

J. H. WOODWARD, B. S., M. D.,
BURLINGTON, Vt.,
Professor of Materia Medica and Therapeutics;
Ophthalmologist to Mary Fletcher Hospital.

ABEL M. PHELPS, M. D.,
NEW YORK CITY,
Professor of Surgery
Consulting Surgeon to Mary Fletcher Hospital.
PROFESSORS OF SPECIAL SUBJECTS.

ROBERT WILLIAM TAYLOR, M. D., NEW YORK CITY,
Professor of Diseases of the Skin and Venereal Diseases.

STEPHEN MARTINDALE ROBERTS, A. M., M. D., NEW YORK CITY,
Professor of Diseases of Children.

ADRIAN THEODORE WOODWARD, A. M., M. D., BRANDON, VT.,
Professor of Surgical Diseases of Women.

J. H. WOODWARD, M. D., BURLINGTON, VT.,
Professor of Diseases of the Eye and Ear.

WILDER L. BURNAP, A. M., BURLINGTON, VT.,
Professor of Medical Jurisprudence.

GEORGE B. HOPE, M. D., NEW YORK CITY,
Professor of Diseases of the Throat.

ANDREW J. WILLARD, A. M., M. D., BURLINGTON, VT.,
Professor of Sanitary Science and Hygiene.

E. D. FISHER, M. D., NEW YORK CITY,
Professor of Diseases of the Mind and Nervous System.

CHARLES B. KELSEY, M. D., NEW YORK CITY,
Professor of Diseases of the Rectum.

HENRY CRAIN TINKHAM, M. D., BURLINGTON, VT.,
Adjunct to the Chair of Anatomy and Demonstrator of Anatomy.

JO H. LINSLEY, M. D., NEW YORK CITY,
Chemical Laboratory Instructor.

FACULTY TO PRELIMINARY SESSION, 1890.

PROF. A. P. GRINNELL, M. D.,
Instructor in Theory and Practice of Medicine;
Attending Physician to Mary Fletcher Hospital.

Prof. J. H. WOODWARD, B. S., M. D.,
Instructor in Materia Medica and Therapeutics;
Ophthalmologist to Mary Fletcher Hospital.

ANDREW J. WILLARD, A. M., M. D.,
Instructor in Chemistry and Toxicology, and Assistant to the Chair of Chemistry.

JOHN BROOKS WHEELER, M. D.,
Instructor in Principles and Practice of Surgery;
Attending Surgeon to Mary Fletcher Hospital.

B. J. ANDREWS, M. D.,
Instructor in Physiology and Microscopic Anatomy;
Superintendent Mary Fletcher Hospital.

HENRY CRAIN TINKHAM, M. D.,
Instructor in Anatomy;
Attending Physician to Mary Fletcher Hospital.

J. C. RUTHERFORD, M. D.,
Instructor in Obstetrics and Diseases of Women and Children;
Attending Physician to Mary Fletcher Hospital.
ANNUAL ANNOUNCEMENT.

1890

The Medical Department of the University of Vermont and State Agricultural College was chartered by the State in 1823. This Department was organized on its present basis, in 1854, since which time lectures have been given, and classes graduated in medicine every year. The institution consequently is now one of the oldest Medical Colleges in the United States. Among the distinguished medical teachers who in former years have occupied chairs in the Medical Faculty, may be mentioned Nathan R. Smith, Alonzo Clark, John Pomeroy, Nathan Smith, Wm. Paddock, S. W. Thayer, Dr. Bliss, Edward E. Phelps, Benjamin Lincoln, Horatio Nelson, Prof. Perkins and Orrin Smith; Prof. Wm. Darling, M. D., LL. D., F.R. C. S., (England); Prof. J. L. Little, M. D., of New York; others of professional eminence, still living, who were formerly associated with the Medical Faculty, are as follows: Hammond, Ordronaux, Roosa, Dunster, Yale, Thomas Antisell, of Washington, D. C., Hon. Edward J. Phelps, A. L. Ranney, J. Williston Wright, W. O. Moore and G. M. Garland.

It has been the custom of the Medical Faculty to select from other institutions, and from all parts of the country, the best teachers that could be obtained, a custom which has been facilitated by the circumstances of the regular lecture sessions being held from March to July, when the lecturers from the large colleges of other cities, holding their lecture sessions only during the winter months, could thus be enabled to contribute their services to the University of Vermont. And the past history of the college and its present prosperity sufficiently demonstrate that this plan has been eminently successful. At no time since the organization of this Medical School have its prospects been more promising than at present. The session of 1890, being the thirty-seventh in number since the present organization of the college, will, it is anticipated, bring together a larger number of students than have assembled at any previous session, and the Medical Faculty will make every effort to provide a correspondingly improved course of instruction.
NEW COLLEGE BUILDING.
THE GIFT OF MR. JOHN P. HOWARD.

The new College Building, erected in 1884, is now complete. It is a substantial brick edifice, situated on Pearl street, in the City of Burlington, on the north side of and immediately overlooking the College Park. The lecture room amphitheatre will seat comfortably three hundred and fifty students.

The laboratories for Practical Chemistry and Physiology, and the Dissecting Room for Practical Anatomy, are ample in size and supplied with all modern conveniences and apparatus that may be required for chemical experiments and physiological and anatomical demonstrations.

The College Museum is spacious, well lighted, and contains a large and carefully arranged collection of specimens and preparations—many of them rare—illustrating both normal and abnormal structures. The museum is always open to inspection by the students.

The whole building is heated by steam, thoroughly ventilated, and, in all its appointments, admirably fitted for medical teaching.

As stated in former catalogues the funds for the erection of the new college were contributed by the late Mr. JOHN PURPLE HOWARD, whose generous liberality is so well known and gratefully remembered by the people of Burlington.

Plan of Instruction.

The plan of instruction adopted by this Institution comprises a complete course of Scholastic Lectures upon the seven essential branches of Medical Science, viz: Anatomy, Physiology, Chemistry, Materia Medica and Therapeutics, Surgery, Obstetrics, and the Theory and Practice of Medicine.

In order to render the several courses of instruction as through as possible, the Faculty have selected a number of medical gentlemen to lecture upon special subjects. Such parts of the regular course as are not taught in detail by the regular Professors will thus receive special attention from gentlemen who are acknowledged authorities in their respective specialties, each one giving a short and practical course of lectures.

This plan, which was adopted for the first time ten years ago, has been of great value to and is highly appreciated by the students, since it enables them to obtain a more exact practical knowledge of important subjects than they can receive from the general lecture course.


These lectures on special subjects are delivered during the regular session, without extra expense, and not in the preliminary term, as is the custom in most Colleges.
GENERAL OUTLINE OF THE
COURSE OF LECTURES.

OBSTETRICS AND DISEASES OF WOMEN.

PROF. A. F. A. KING.

Prof. King holds the same Chair in the Columbian University, at Washington, D. C., and was for many years one of the attending physicians at the Providence Hospital in that city, and is now one of the attending physicians to the Children's Hospital.

His lectures, while presenting an outline of the whole Science and Art of Midwifery, are especially designed to convey a practical knowledge of this subject, and to render the difficult parts of it easily intelligible. To this end a large collection of full sized diagrams, with papier-mache models and natural preparations, are used for illustration. The mechanism of labor is demonstrated upon the manikin; and obstetrical instruments of all kinds are exhibited, and their uses explained. Mathieu's Improved Elastic Manikin, imported by the Faculty from Paris, is employed, with a recent foetal cadaver, for demonstrating obstetrical operations.

In the department of Gynæcology all instruments and other appliances required in treating the Diseases of Women will be exhibited, together with a complete collection of colored diagrams illustrating the various pathological conditions of the female organs.

In this department Dr. King will be assisted by the Professor of Surgical Gynæcology, and the regular surgical clinics will enable the class to witness the various operations.

PRACTICE OF MEDICINE.

PROF. A. P. GRINNELL.

So far as possible, the instruction in this department will consist of clinical and didactic Lectures, given in such a manner as will best enable the student to become thoroughly acquainted with the symptoms, pathology and treatment of disease, exhibiting the practical application of remedies at the bedside.

The Hospital will supply a sufficient number of patients who will receive treatment before the class, giving the students an opportunity of witnessing the methods adopted for investigation of disease in practice. Morbid specimens, casts and diagrams will be employed to illustrate the Lectures.
CHEMISTRY AND TOXICOLOGY.

PROF. RUDOLPH A. WITTHAUS.

The instruction in this department will be adapted to the special requirements of the practitioner in medicine. The Philosophy of Chemistry will be taught in such a manner as to afford the students a firm groundwork for the rational study of the subject. Those portions of practical chemistry having a direct bearing upon physiology, pathology and therapeutics will be particularly dwelt upon, to the exclusion of those portions which are of mere technical interest. The more important application of chemistry to the science of poisons will receive particular attention.

In the new College building a commodious and well appointed practical laboratory has been provided, in which special instruction is given in the chemical manipulations required in the examination of Urine, in Toxicology, and in such analytical processes as are required of the physician.

PHYSIOLOGY AND MICROSCOPIC ANATOMY.

PROF. J. HENRY JACKSON.

The description of the functions of each organ and tissue is preceded by a careful examination of its minute structure. By the aid of lecture-room microscopes, sections of healthy tissues are exhibited to each student, and an opportunity is offered for special instruction in the preparation and mounting of specimens. Diagrams, models and charts furnish further help to a complete comprehension of the lectures. Such vivisections are given as can be shown with practical advantage to the whole class, and the teaching of the subject of Physiology has in view the elucidation of Pathology.

GENERAL, DESCRIPTIVE and SURGICAL ANATOMY.

PROF. WILLIAM B. TOWLES.

The lectures in this course will be fully illustrated by drawings, diagrams, models, preparations and dissections on the cadaver. The object will be to render the instruction thoroughly practical, by as complete illustration as possible of the facts taught, and by frequent examinations in preparations and dissections.

MATERIA MEDICA AND THERAPEUTICS.

PROF. J. H. WOODWARD.

The scope of instruction in this department will embrace a thorough and practical study of those drugs which have a real therapeutic value. The medicinal and the toxic effects, and the therapeutic uses of each, will be discussed systematically, in such a manner that the student will receive a practical knowledge of the subject, founded on a scientific basis.
The methods of medication, the principles and the practice of prescription-writing, and the therapeutic uses of heat, cold and electricity, will be taught during the course.

PRINCIPLES AND PRACTICE OF SURGERY.

PROF. A. M. PHELPS.

The course on Surgery will consist in didactic and clinical lectures illustrated by plates, diagrams and surgical apparatus in general. All of the more important surgical operations will be performed, on the cadaver, before the class. On Monday, Wednesday and Saturday of each week, during the surgical course, a clinic will be held in the large amphitheatre of the Mary Fletcher Hospital, where the abundant supply of material coming, as heretofore, from all parts of the State, will enable the student to witness a large number of the capital operations of surgery.

Lectures on Special Subjects.

The faculty being desirous of affording to the student every facility for the study of the various departments of medicine, have established the following special courses, which will be extended hereafter, and it is believed that, with this addition to the regular curriculum, the advantages afforded by this College are unsurpassed by any medical institution outside of our large cities. No extra charge is made for attendance upon these special lectures.

DISEASES OF THE SKIN.

Prof. Robert W. Taylor, one of the physicians to Charity Hospital, New York, whose labors in this department of medicine are well known to the profession, will deliver a course of lectures on this subject, illustrated by plates, diagrams and microscopic specimens. He will also hold several clinics, thus giving the students an opportunity of becoming familiar with the latest views on the subject of Dermatology.

DISEASES OF CHILDREN.

Prof. Stephen M. Roberts will deliver a course of lectures on Diseases of Infancy and Childhood, a department of study generally either completely ignored, or but very superficially treated, although of the utmost importance to the practicing physician.

SURGICAL DISEASES OF WOMEN.

Prof. A. T. Woodward, of Brandon, Vt., will give during the first part of the session a course of lectures on the Surgical Diseases of Women. The lectures will embrace subjects to which Dr. Woodward has for many years given special attention.
DISEASE OF THE EYE AND EAR.

Prof. J. H. Woodward will give a course of lectures on the Diseases of the Eye and Ear. He will hold daily clinics during his course, so that the student will be able to witness most of the important operations in this department.

DISEASES OF THE MIND AND NERVOUS SYSTEM.

The course of lectures on Diseases of the Mind and Nervous System will be delivered by Prof. E. D. Fisher of New York. The lectures will be both clinical and scholastic, and will have special reference to the improved methods of research and treatment established by the most recent investigations. Electricity, in its relations to the nervous system, both in health and disease, will be the subject of particular attention.

MEDICAL JURISPRUDENCE.

PROF. WILDER L. BURNAP.

For many years, the teaching of Medical Jurisprudence has been neglected in most of the Medical Colleges, but of late there has been a growing conviction that a knowledge of the legal side of this subject is one of the essentials of a thorough professional education; and it has properly been made compulsory in many States.

Believing a knowledge of this science to be of prime importance to physicians, especially where Medico-legal investigation requires from them expert testimony, the Faculty a few years since restored the lectures in this department to the general curriculum of study, and the great interest shown in the subject by the students as well as the practical and instructive character of the lectures, have convinced all that they have thereby added materially to the importance and completeness of the course.

SANITARY SCIENCE AND HYGIENE.

PROF. ANDREW J. WILLARD.

The subjects of the proposed course of lectures are the ventilation and warming of buildings, the principles of house drainage, the proper arrangement of soil and waste pipes, the various plumbing fixtures, the methods of testing complete work, the sewerage of cities and towns, and the methods employed for the removal and disposal of sewerage.

DISEASES OF THE THROAT AND NOSE.

Prof. George B. Hope will deliver a course of lectures on Diseases of the Throat and Nose. At his clinic, demonstrations will be given, and Laryngoscopy and Rhinoscopy taught.

DISEASES OF THE RECTUM.

Prof. Charles B. Kelsey, of New York, who has for many years given special attention to Diseases of the Rectum, will be able to show important cases and perform all operations required.
CLINICAL ADVANTAGES.

THE MARY FLETCHER HOSPITAL,

Erected solely by the generosity of the lady whose honored name it bears, was opened twelve years ago for the reception of patients. At the time of its construction, Miss Fletcher added to the Hospital Buildings a splendid amphitheatre, specially adapted to clinical teaching, and designed to offer additional advantages in the way of Clinical instruction to the Medical Students of this College, a purpose which has been fully realized, and for which Students and Faculty are alike grateful to the respected donor.

An additional pavilion ward, now contemplated, will, it is understood, be used as a Lying-in ward and for Gynaecological cases, and it is anticipated an opportunity may be afforded for Clinical instruction in Obstetrics to at least a part of the second and third year students.

This Hospital consists of a large and elegant administrative building, with a large number of rooms for private patients, and two large pavilion wards. In a separate building, connecting with the wards and administrative building by a corridor, is a large amphitheatre, capable of seating two hundred persons. There are also an anesthetizing and a recovery room opening into the amphitheatre. Rooms for out-patients are also attached to the building. In fact, every arrangement for Clinical instruction is found here.

In the amphitheatre, Medical and Surgical Clinics will be held during the regular session, to which all the students are admitted without extra charge.

There is also a Pathological Room capable of seating about one hundred students. Here, during the session, all the post-mortem examinations will be held in the presence of the class, and lectures will be delivered on Pathological Anatomy and Histology.

The following are members of the Medical and Surgical Board of the Hospital, who are connected with the Medical College:

Consulting Surgeon: Prof. A. M. Phelps,

Attending Physicians:  
Prof. A. P. Grinnell,  
Dr. J. C. Rutherford,  
Dr. H. C. Tinkham,

Attending Surgeon:  
Dr. J. B. Wheeler.

Ophthalmic Surgeon: 
Prof. J. H. Woodward.
COLLEGE CLINICS.

The following College Clinics will be held during the regular term. Patients presenting themselves at these Clinics for advice and treatment, are examined, the peculiarities of each case are explained, the appropriate treatment is prescribed, and the requisite surgical operations are performed before the class.

A Medical Clinic will be held on Wednesday by Profs. Grinnell or Woodward during the first half of the term.

A Surgical Clinic will be held by Prof. Phelps every Saturday morning, from 9 to 12 o'clock, and every Monday and Wednesday afternoon from 3 to 5 o'clock, during the latter half of the session. A large number of surgical operations will be performed at these Clinics.

A Clinic for Diseases of the Eye and Ear, by Prof. Woodward, will be held during his course of lectures.

A Clinic for Diseases of the Skin, by Prof. Taylor, will be held during his course of lectures.

A Clinic for Diseases of Children will be held by Prof. Roberts.

A Clinic for Diseases of the Nervous System will be held during the course of lectures by Dr. Edward D. Fisher.

A Clinic for Diseases of the Throat will be held by Prof. Hope.

A Clinic for Diseases of the Rectum will be held by Prof. Kelsey.

Due notice of the time of holding the above Clinics will be given.

THE FOLLOWING LISTS OF OPERATIONS WILL GIVE SOME IDEA OF THE EXTENT OF THE SURGICAL CLINICS HELD DURING THE SESSION OF 1889:

Angioma, 1.
Anchylosis of Inferior Maxillary (Operated).
Aspiration (Pleural).
Bunions, Radical Cure for.
Hernia, Radical Cure for.
Hare Lip, 2.
Naevus.
Plastic Operations, 3.

OPHTHALMIC CLINIC

Cataract, 6.
Ptosis, 1.
Glucomar, 2.
Asthenopia, 1.
Atrophy of Optic Nerve, 1.
Retinitis, 1.
Granular Lids, 1.

Senile Ectropia, 1.
Phlycienular Keratitis, 1.
Hydrophthalmia, 1.
Iridectomy, 3.
Enucleation, 1.
Strabismus, 2.
Chronic Suppurative Otitis Media, 1.
SPECIAL PRACTICAL INSTRUCTION.

Courses in practical manipulations and study are advised as supplemental to the regular methods of scholastic and clinical teaching, with a view to more perfectly drilling the student in the actual performance of the various methods of diagnosis and treatment employed by the physician.

Students may avail themselves of the following private courses offered in connection with this institution; but it is optional with the student, except in Practical Anatomy, which, if any, of these courses he shall follow.

PRACTICAL ANATOMY.
H. C. Tinkham, M. D., Demonstrator of Anatomy.

As a thorough knowledge of Anatomy is only to be obtained by dissection, every student is strongly recommended by the Faculty to dissect as much as possible during his course of study. The dissecting room of the new College is large, commodious, well ventilated and lighted. Material is furnished free. The Demonstrator will be in daily attendance during the regular and preliminary terms.

The practical Anatomy fee of $10.00 includes material and entitles each student to all the advantages of the dissecting room during the Winter and Spring Course without further charge. Every new matriculant will be required to take out the practical Anatomy ticket either in the preliminary or regular term, and this entitles him to the privileges of the dissecting room at all times without further expense.

URINARY ANALYSIS.
R. A. Witthaus, M. D., Professor of Chemistry.

Jo H. Linsley, M. D., Laboratory Instructor.

Instruction in Practical Urinary Analysis will be given during the preliminary and regular terms, under the supervision of the Professor of Chemistry. It is recommended that those attending the preliminary term take this course at that time.

Fee $10.00 (including cost of material.)

OBSTETRICS.
A. F. A. King, Professor of Obstetrics, etc.

A course of practical instruction on the Manikin will be given to those who may desire it.

Fee $5.00.
PHYSICAL DIAGNOSIS.
A. P. Grinnell, M. D., Professor of Practice and Physical Diagnosis.
Students in this course will have the opportunity to examine cases and make diagnoses. Fifteen students only will form a class.
Fee $10.00. Ten lessons.

MICROSCOPY.
J. H. Jackson, M. D., Professor of Physiology and Microscopic Anatomy.
Instruction in the use of the microscope and in the preparation and mounting of normal and pathological specimens, and of urinary deposits, will be given in the physiological laboratory, during the preliminary and regular terms, by the professor of this branch in person, or by his assistant.
Fee $10.00 (including the cost of material, except slides and cover glasses.)

MINOR SURGERY AND BANDAGING.
J. B. Wheeler, M. D., Instructor in Surgery.
Practical instruction on this subject embraces the application of bandages, the various methods of dressing used in the treatment of wounds, fractures and dislocations, etc.
Fee $5.00.

DISEASES OF THE THROAT AND NOSE.
Prof. Geo. B. Hope.
A special class will be formed for practical instruction in the Examination and Treatment of Diseases of the Throat.
Fee $5.00.

OPERATIVE SURGERY.
J. B. Wheeler, M. D., Instructor in Surgery.
Students will be instructed in the various operations upon the cadaver.
Fee $15.00.

OPERATIVE SURGERY FOR PRACTITIONERS.
J. B. Wheeler, M. D., Instructor in Surgery.
A course of practical instruction in surgical operations upon the cadaver will be given, for the benefit of practitioners of medicine. This course is designed to give the general practitioner an opportunity of familiarizing himself with the practical details of Operative Surgery. It will consist of demonstrations, by the instructor, of the various surgical operations, and of their performance upon the cadaver by the members of the class.
The course will be held in the month of December, and will last two weeks.
Fee $15.00.
Requirements for Graduation.

Candidates for the degree of Doctor of Medicine, before presenting themselves for examination must have attended at least two full courses of lectures of twenty weeks duration each, the latter at this College. The candidate must have studied medicine three years, must have attained the age of twenty-one years, and must present full certificates of the time of his study, of age, and of moral character. Each candidate is required to deposit his examination fee with the Dean of the Faculty one month before the close of the session, and to furnish evidence of having pursued the study of practical anatomy under the direction of a demonstrator. He must also pass a satisfactory written or oral examination before the Medical Faculty and Board of Medical Examiners appointed by the State Medical Society. No thesis is required.

Two full courses of lectures of at least twenty weeks each are absolutely required, and no period of practice will be taken as an equivalent of one course.

The only courses of lectures recognized by this Faculty are those taken at Medical Colleges recognized by the American Medical Association. The tickets and diplomas of Eclectic, Homœopathic, or Botanic colleges, or of colleges devoted to any special system of medicine, are considered irregular, and will not be recognized under any circumstances. Certificates from preceptors who practice any particular system of medicine, or who advertise, or violate in any way the Code of Ethics adopted by the profession, will not be accepted under any circumstances, even if the preceptors be regular graduates in medicine.

Graduates of other regular colleges who desire a degree from this University must pass a satisfactory examination in the branches of Anatomy, Physiology, Chemistry, Materia Medica, Practice of Medicine, Surgery and Obstetrics. No thesis is required.

British registered practitioners who are legally qualified to practice both medicine and surgery, of good standing and furnished with proper credentials, who are medical graduates of an university of Great Britain or Ireland, or licentiates, members or fellows of a royal college of physicians or surgeons of Great Britain or Ireland, will be allowed to proceed to the Medical Degree in this University upon passing a satisfactory examination in the branches of Anatomy, Physiology, Chemistry, Materia
Medical, Practice of Medicine, Surgery and Obstetrics, and upon payment of the required free. Residence is not required from foreign candidates for the degree of Doctor of Medicine, who must, however, appear in person for examination between July 5th and July 13th. Degrees in absentia are not conferred by this University under any circumstances whatsoever.

SPECIAL EXAMINATIONS IN THE ELEMENTARY DEPARTMENTS.

Students who have attended two full courses of lectures in all departments taught in the College, may be examined upon Anatomy, Physiology, Chemistry, and Materia Medica at the end of the second course, and if they be successful in these examinations will be examined at the end of the third course upon Practice of Medicine, Surgery and Obstetrics only. Candidates for the primary examinations will be required to pay three-fifths of the examination fee. The primary examinations are held at the close of the regular session only. The certificate and the remainder of the examination fee are to be handed to the Dean at the regular time before the final examination. Students who have passed the primary examinations are required to attend another full course of lectures before they can be admitted to their final examinations. Students who desire to graduate by passing the primary examination, and afterwards the final examination upon the three practical departments, must attend three full courses of lectures. Certificates of having passed in any branch or branches in other colleges are not accepted by this College.
REGULAR TERM.

THE REGULAR WINTER COURSE OF LECTURES.

The session of 1890 will commence on the last Thursday of February, and will continue twenty weeks. This course will consist of from five to six lectures daily, in the various departments of Medicine and Surgery.

FEES FOR THE REGULAR SESSION.

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Matriculation Fee, — Payable Each Term</td>
<td>$5.00</td>
</tr>
<tr>
<td>Fees for the Full Course of Lectures by All the Professors</td>
<td>75.00</td>
</tr>
<tr>
<td>Single Tickets</td>
<td>12.00</td>
</tr>
<tr>
<td>Perpetual Ticket, good for any number of Regular Courses</td>
<td>125.00</td>
</tr>
<tr>
<td>Examination Fee, (payable once only and not returnable)</td>
<td>25.00</td>
</tr>
<tr>
<td>Examination Fee, Primary Branches, (payable once only and not returnable)</td>
<td>15.00</td>
</tr>
<tr>
<td>Examination Fee, Final Branches, (payable once only and not returnable)</td>
<td>10.00</td>
</tr>
<tr>
<td>Demonstrator’s Fee, required of every new matriculant, (including Dissecting Material, payable but once)</td>
<td>10.00</td>
</tr>
</tbody>
</table>

Students who have already attended two full courses of lectures in some other regular school or schools, are admitted on paying the matriculation fee and $40.00.

Students who have attended one full course in this College and one full course in some other regular Medical School, are admitted on paying the matriculation fee and $25.00.

Students who have attended two full courses in this College are admitted to subsequent courses on payment of five dollars only.

Graduates of other regular American Medical Schools are admitted on payment of the matriculation fee and $25.00.

Foreign applicants (see page 17) for the Medical Degree of this University, are admitted on payment of a fee of eight guineas.

Graduates of this school are admitted without fee.

Theological students are admitted on payment of the matriculation fee only, unless intending to graduate in medicine, in which case they will be required to conform to the above conditions.
Preliminary Term to Session of 1890.

RECITATIONS AND LECTURES.

A Preliminary Course of Lectures and Recitations on Anatomy, Physiology, Chemistry, Materia Medica, Surgery, Obstetrics, the Principles and Practice of Medicine, and their auxiliary branches, will be given, commencing on the first Thursday of November each year, and continuing until the following March. Opportunity will be offered for private dissection. Material will be furnished at cost. Daily demonstrations will be made by the Instructor of Anatomy. The fee for the above course is $35.

Attendance upon this term is optional with the student, and it is not reckoned as a Course of Lectures. Students, however, are earnestly advised to attend, as they are thus better prepared to comprehend the lectures in the Regular Course.

CORPS OF INSTRUCTORS.

Prof. A. P. Grinnell, Theory and Practice.
Prof. J. H. Woodward, Materia Medica and Therapeutics.
Dr. A. J. Willard, Chemistry.
Dr. John B. Wheeler, Surgery.
Dr. H. C. Tinkham, Anatomy.
Dr. J. C. Rutherford, Obstetrics and Diseases of Women and Children.
Dr. B. J. Andrews, Physiology and Microscopic Anatomy.

Letters requesting information should be directed to
Prof. A. P. Grinnell, Burlington, Vt.,
Dean of the Faculty.

Or to Dr. H. C. Tinkham,
Secretary of the Preliminary Course.

FACULTY PRIZES.

The Faculty have established two prizes for general proficiency in examination—a first Prize of Fifty Dollars, and a Second Prize of Twenty-five Dollars. These prizes will be awarded as follows:

The ten students who pass the best examinations for their degree will be allowed to compete in a written examination for the prizes; of this number the five who rank highest shall be called Honor Men, and will each receive a Special Diploma of Honor, and of these last, those who are deemed worthy shall receive respectively the first and second prizes.
The Honor Men for the Class of 1889 were.

Owing to the fact that Mr. G. E. Davenport and J. C. Smith marked alike in every branch, it was decided to give to each the same amount as a prize.

BOARD.

Board may be obtained for from $3.50 to $5.00 per week. Good accommodations furnished students who wish to board themselves. Many adopt this method at a great reduction in expense. Students who intend to board themselves will find such bedding and culinary articles as they may require furnished with the rooms.

After registering, every student is furnished with a certificate entitling him to half fare on all railroad and steamboat lines running into Burlington.

TEXT BOOKS

AND WORKS OF REFERENCE.

The work first named on each subject is preferred.


On Physiology:—Yeo's Manual of Physiology, Dalton's Human Physiology, Foster, Flint's.

On Chemistry:—Withthaus' Manual, Withthaus' Laboratory Guide.

On Theory and Practice:—Loomis, Flint, Roberts, Tanner, Watson, Reynolds, Pepper, Niemeyer, Delafield's Post Mortem Examinations.


On Diseases of Women:—Thomas, or Barnes, Byford, 3d edition, Edis, Munde's Minor Surgical Gynecology.


On Surgery:—Bryant, Druitt (Eng. Ed.), Gross, Paget's Surgical Pathology, Billroth's Surgical Pathology, Heath's Minor Surgery and Bandaging, Ranney's Surgical Diagnosis.

On Diseases of the Urinary Organs:—Bumstead & Taylor, Gouley, Van Buren & Keyes.

On Diseases of the Eye and Ear:—Nittleship on Eye, Pomeroy on Ear.

On Medical Jurisprudence:—Wharton & Stille, Ordronaux, Beck, Taylor.


On Diseases of the Skin:—Fox, Piffard, Liveing.

On Diseases of the Nervous System:—Hammond.

For Reference:—Dunglison's Medical Dictionary.
<table>
<thead>
<tr>
<th>Name</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthur Clayton Aldrich</td>
<td>New York</td>
</tr>
<tr>
<td>Norman William Bellrose</td>
<td>Vermont</td>
</tr>
<tr>
<td>J. Jay Bennett</td>
<td>New York</td>
</tr>
<tr>
<td>Windsor Aldrich Brown</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Edward Henry Bushnell</td>
<td>Vermont</td>
</tr>
<tr>
<td>Wilfred Peter Byrne</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Frank Edwin Card</td>
<td>Connecticut</td>
</tr>
<tr>
<td>Caleb Wakefield Clark</td>
<td>Vermont</td>
</tr>
<tr>
<td>George Conderman</td>
<td>New York</td>
</tr>
<tr>
<td>Albert Simpson Cummins</td>
<td>U.S. Army</td>
</tr>
<tr>
<td>Alfonso Clemens Czibulka</td>
<td>Connecticut</td>
</tr>
<tr>
<td>George Edwin Davenport</td>
<td>Vermont</td>
</tr>
<tr>
<td>Frederick Smith Billingham</td>
<td>Vermont</td>
</tr>
<tr>
<td>Linwood Hildreth Dorr</td>
<td>Maine</td>
</tr>
<tr>
<td>Daniel Edgar Drake</td>
<td>New York</td>
</tr>
<tr>
<td>Frederick George Elliott</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Isaac Newton Fox</td>
<td>New Hampshire</td>
</tr>
<tr>
<td>Franklin Willard Freeman</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Fred Goodwin</td>
<td>Nova Scotia</td>
</tr>
<tr>
<td>William Richard R. Granger</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Charles Frederick Griswold</td>
<td>New York</td>
</tr>
<tr>
<td>William Hackett</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Clarence Aldis Hastings</td>
<td>New York</td>
</tr>
<tr>
<td>Albert Charles A. Jayet</td>
<td>Quebec</td>
</tr>
<tr>
<td>Ellis Preston Jones</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Henry Rival Jones, Jr.</td>
<td>Vermont</td>
</tr>
<tr>
<td>William Alexander Judson</td>
<td>Prince Edw. Island</td>
</tr>
<tr>
<td>Charles Andrew Keegan</td>
<td>New Hampshire</td>
</tr>
<tr>
<td>Joseph Edward Lumbard</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>George Clifford Lyman</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>John Stephen Mahoney</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Joseph Pierre Marchildon</td>
<td>Quebec</td>
</tr>
<tr>
<td>Louis Aine Maynard</td>
<td>Quebec</td>
</tr>
<tr>
<td>Roger Austin Mead</td>
<td>New York</td>
</tr>
<tr>
<td>Frank Warren Merritt</td>
<td>Maine</td>
</tr>
<tr>
<td>Frank McAvinnie</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Allan Blakemore Montz</td>
<td>Virginia</td>
</tr>
<tr>
<td>Marshall James Mosher</td>
<td>Nova Scotia</td>
</tr>
<tr>
<td>Eugene Clayton Mowry</td>
<td>Rhode Island</td>
</tr>
<tr>
<td>John Joseph Murphy</td>
<td>New York</td>
</tr>
<tr>
<td>Anson Mortimer Norton</td>
<td>Vermont</td>
</tr>
<tr>
<td>Fred Luther Osgood</td>
<td>Vermont</td>
</tr>
<tr>
<td>Charles Edwin Parker</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Anson Warren Penniman</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Erasmus Arlington Pond</td>
<td>Vermont</td>
</tr>
<tr>
<td>Henry Herbert Reynolds</td>
<td>New York</td>
</tr>
<tr>
<td>Robert Stewart Royce</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Willard Nelson Simmons</td>
<td>Connecticut</td>
</tr>
<tr>
<td>Judson Clark Smith</td>
<td>Vermont</td>
</tr>
<tr>
<td>Frank Bradford Sprague</td>
<td>Rhode Island</td>
</tr>
<tr>
<td>Ashley Livingstone Stowell</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Samuel Strock</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>Willard Cornelius Thompson</td>
<td>New York</td>
</tr>
<tr>
<td>Benjamin Manwell Turner</td>
<td>Maine</td>
</tr>
<tr>
<td>Miles Egbert Varney</td>
<td>New York</td>
</tr>
<tr>
<td>William Winthrop Wellington</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>Robert Creighton White</td>
<td>Vermont</td>
</tr>
<tr>
<td>William James Whiteford</td>
<td>New York</td>
</tr>
<tr>
<td>Alfred Judson Young</td>
<td>New York</td>
</tr>
<tr>
<td>STUDENT</td>
<td>RESIDENCE</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>W. W. Adams</td>
<td>Canterbury, Conn</td>
</tr>
<tr>
<td>A. C. Aldrich</td>
<td>Glens Falls, N. Y</td>
</tr>
<tr>
<td>S. J. Alkie</td>
<td>Brooklyn, N. Y</td>
</tr>
<tr>
<td>A. L. Allen</td>
<td>W. Stockholm, N. Y</td>
</tr>
<tr>
<td>B. P. Allen</td>
<td>Oriskany Falls, N. Y</td>
</tr>
<tr>
<td>G. A. Allen</td>
<td>E. Stoneham, Me</td>
</tr>
<tr>
<td>G. B. Allen</td>
<td>Hyde Park, Vt</td>
</tr>
<tr>
<td>J. M. Allen</td>
<td>St. Johnsbury, Vt</td>
</tr>
<tr>
<td>J. F. Barringer</td>
<td>Chicago, Ill</td>
</tr>
<tr>
<td>H. L. Bartlett</td>
<td>E. Stoneham, Me</td>
</tr>
<tr>
<td>E. E. Barton</td>
<td>Bristol, Vt</td>
</tr>
<tr>
<td>W. F. Beck</td>
<td>Tyrone, Penn</td>
</tr>
<tr>
<td>G. W. Belden</td>
<td>U. S. Army</td>
</tr>
<tr>
<td>N. W. Bellrose</td>
<td>Swanton, Vt</td>
</tr>
<tr>
<td>J. J. Bennett</td>
<td>Lima, N. Y</td>
</tr>
<tr>
<td>B. L. Bissonette</td>
<td>Montreal, Que</td>
</tr>
<tr>
<td>B. W. Bohannan</td>
<td>Norwalk, Conn</td>
</tr>
<tr>
<td>J. M. Brown</td>
<td>Burlington, Vt</td>
</tr>
<tr>
<td>W. A. Brown</td>
<td>Barre Plains, Mass</td>
</tr>
<tr>
<td>L. S. Buckley</td>
<td>Brandford, Conn</td>
</tr>
<tr>
<td>E. D. Burch</td>
<td>Athol, N. Y</td>
</tr>
<tr>
<td>F. H. Burnett</td>
<td>Brattleboro, Vt</td>
</tr>
<tr>
<td>E. H. Bushnell</td>
<td>Groton, Vt</td>
</tr>
<tr>
<td>W. P. Byrne</td>
<td>Philadelphia, Penn</td>
</tr>
<tr>
<td>G. S. Cahill</td>
<td>St. Albans, Vt</td>
</tr>
<tr>
<td>J. O. Calkin</td>
<td>Hillsboro, N. B</td>
</tr>
<tr>
<td>D. Campbell</td>
<td>Marble Mountain, N. S.</td>
</tr>
<tr>
<td>W. S. Campbell</td>
<td>Punxsutawney, Penn</td>
</tr>
<tr>
<td>E. A. Cantey</td>
<td>Boston, Mass</td>
</tr>
<tr>
<td>F. E. Card</td>
<td>Oneca, Conn</td>
</tr>
<tr>
<td>M. L. Chandler</td>
<td>Berlin, Vt</td>
</tr>
<tr>
<td>J. W. Churchill</td>
<td>Hampton, N. Y</td>
</tr>
<tr>
<td>A. A. Claffin</td>
<td>St. Regis Falls, N. Y</td>
</tr>
<tr>
<td>C. W. Clark</td>
<td>Derby, Vt</td>
</tr>
<tr>
<td>J. C. Cochran</td>
<td>Big Run, Penn</td>
</tr>
<tr>
<td>George Conderman</td>
<td>Hornellsville, N. Y</td>
</tr>
<tr>
<td>N. H. Crosby</td>
<td>Brownsville, Me</td>
</tr>
<tr>
<td>STUDENT.</td>
<td>RESIDENCE.</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>A. S. Cummins.</td>
<td>1st Lieut. U. S. A.</td>
</tr>
<tr>
<td>J. B. Cunningham.</td>
<td>Norwich, Conn.</td>
</tr>
<tr>
<td>A. D. David.</td>
<td>Willimantic, Conn.</td>
</tr>
<tr>
<td>M. D. Dickinson.</td>
<td>Albany, N. Y.</td>
</tr>
<tr>
<td>F. W. Freeman, Ph. G. Newton Lr Falls, Mass.</td>
<td></td>
</tr>
<tr>
<td>S. W. Gibbs.</td>
<td>Fall River, Mass.</td>
</tr>
<tr>
<td>Fred R. Goff.</td>
<td>Sangerville, Me.</td>
</tr>
<tr>
<td>Fred Goodwin.</td>
<td>Lorneville, N. S.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDENT</td>
<td>RESIDENCE</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>J. R. Hatch</td>
<td>Gifford, N. H</td>
</tr>
<tr>
<td>M. M. Hathaway</td>
<td>Fall River, Mass.</td>
</tr>
<tr>
<td>J. T. Heffron</td>
<td>Franklin, Vt</td>
</tr>
<tr>
<td>Felix Hilbert</td>
<td>New York City</td>
</tr>
<tr>
<td>E. P. Hodgdon</td>
<td>Gilmanton, N. H.</td>
</tr>
<tr>
<td>J. W. Jackson</td>
<td>Barre, Vt</td>
</tr>
<tr>
<td>A. C. A. Jayet</td>
<td>Montreal, Que</td>
</tr>
<tr>
<td>C. S. Jenne</td>
<td>St. Albans, Vt</td>
</tr>
<tr>
<td>E. P. Jones</td>
<td>Orleans, Mass</td>
</tr>
<tr>
<td>H. R. Jones Jr.</td>
<td>Benson, Vt</td>
</tr>
<tr>
<td>W. P. Jones</td>
<td>Minersville, Penn</td>
</tr>
<tr>
<td>W. H. Jordan</td>
<td>Potsdam, N. Y</td>
</tr>
<tr>
<td>W. A. Judson</td>
<td>Charlotte-town, P. E. I.</td>
</tr>
<tr>
<td>C. A. Keegan</td>
<td>Nashua, N. H</td>
</tr>
<tr>
<td>O. H. Kelsey</td>
<td>Burlington, Vt</td>
</tr>
<tr>
<td>J. C. Kenney</td>
<td>Huntington, Mass</td>
</tr>
<tr>
<td>J. T. Kitts</td>
<td>Sunderland, Eng</td>
</tr>
<tr>
<td>W. F. Koerner</td>
<td>Brooklyn, N. Y</td>
</tr>
<tr>
<td>H. A. Lafond</td>
<td>Laprarie, Que</td>
</tr>
<tr>
<td>C. A. Lamson</td>
<td>Cambridge, Mass</td>
</tr>
<tr>
<td>U. Laurier</td>
<td>Arthabaskaville, Que</td>
</tr>
<tr>
<td>W. E. Lazelle</td>
<td>Plainfield, Vt</td>
</tr>
<tr>
<td>P. F. Leary</td>
<td>Jericho, Vt</td>
</tr>
<tr>
<td>S. F. Leo</td>
<td>Albany, N. Y</td>
</tr>
<tr>
<td>R. R. Leonard</td>
<td>Broome Cen., N. Y</td>
</tr>
<tr>
<td>J. E. Lumbard</td>
<td>Boston, Mass</td>
</tr>
<tr>
<td>C. L. Lyon</td>
<td>Highgate, Vt</td>
</tr>
<tr>
<td>J. S. Mahoney</td>
<td>Boston, Mass</td>
</tr>
<tr>
<td>J. J. Manchester</td>
<td>Moira, N. Y</td>
</tr>
<tr>
<td>J. P. Marchildon</td>
<td>La Fountain, Que</td>
</tr>
<tr>
<td>L. A. Maynard</td>
<td>St. Johns, Que</td>
</tr>
<tr>
<td>S. E. Maynard</td>
<td>Burlington, Vt</td>
</tr>
<tr>
<td>Frank M'cavanenue</td>
<td>Lowell, Mass</td>
</tr>
<tr>
<td>C. F. McCarthy</td>
<td>Watkins, N. Y</td>
</tr>
<tr>
<td>A. C. McDowell</td>
<td>Glover, Vt</td>
</tr>
<tr>
<td>C. McKane</td>
<td>Monrovia, Liberia</td>
</tr>
<tr>
<td>J. J. McPhie</td>
<td>Boston, Mass</td>
</tr>
<tr>
<td>J. E. McSweeney</td>
<td>North Creek, N. Y</td>
</tr>
<tr>
<td>Roland McSweeney</td>
<td>Glens Falls, N. Y</td>
</tr>
<tr>
<td>R. A. Mead, A. M.</td>
<td>New York City</td>
</tr>
<tr>
<td>F. W. Merritt</td>
<td>Jay, Me</td>
</tr>
<tr>
<td>Jas. Monroe</td>
<td>Dixon, P. O</td>
</tr>
<tr>
<td>A. B. Montz</td>
<td>Charlottesville, Va</td>
</tr>
<tr>
<td>B. G. Moran</td>
<td>Nashua, N. H</td>
</tr>
<tr>
<td>J. W. Moriarty</td>
<td>Bombay, N. Y</td>
</tr>
<tr>
<td>M. J. Mosher</td>
<td>St. Croix, N. S.</td>
</tr>
<tr>
<td>E. C. Mowry</td>
<td>Providence, R. I</td>
</tr>
<tr>
<td>J. J. Murphy</td>
<td>Elizabethtown, N. Y</td>
</tr>
<tr>
<td>G. E. Myers</td>
<td>Hartford, Conn</td>
</tr>
<tr>
<td>A. J. Myhill</td>
<td>Buffalo, N. Y</td>
</tr>
<tr>
<td>STUDENT.</td>
<td>RESIDENCE.</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>F. M. Noble</td>
<td>Bloomingdale, N. Y.</td>
</tr>
<tr>
<td>M. Nolan</td>
<td>Haverhill, Mass</td>
</tr>
<tr>
<td>A. M. Norton</td>
<td>Bristol, Vt.</td>
</tr>
<tr>
<td>R. F. Oliver</td>
<td>Somerville, Mass</td>
</tr>
<tr>
<td>J. H. O'Neill</td>
<td>W. Chazy, N. Y.</td>
</tr>
<tr>
<td>T. L. O'Reilly</td>
<td>New York City</td>
</tr>
<tr>
<td>F. L. Osgood</td>
<td>Newfane, Vt.</td>
</tr>
<tr>
<td>C. E. Parker</td>
<td>Oakham, Mass</td>
</tr>
<tr>
<td>A. W. Penniman</td>
<td>Dudley, Mass</td>
</tr>
<tr>
<td>H. A. Pequin</td>
<td>St. Cesaire, Que.</td>
</tr>
<tr>
<td>S. J. Phaneuf</td>
<td>Nashua, N. H.</td>
</tr>
<tr>
<td>A. G. Phipps</td>
<td>Milan, N. H.</td>
</tr>
<tr>
<td>G. J. Pollard</td>
<td>Deansville, N. Y.</td>
</tr>
<tr>
<td>E. A. Pond, Jr.</td>
<td>Rutland, Vt.</td>
</tr>
<tr>
<td>C. G. Prill</td>
<td>Springville, N. Y.</td>
</tr>
<tr>
<td>S. E. Randall</td>
<td>St. Johnsbury, Vt.</td>
</tr>
<tr>
<td>H. H. Reynolds</td>
<td>Malone, N. Y.</td>
</tr>
<tr>
<td>J. D. Ribeiro</td>
<td>Janeiro, Brazil</td>
</tr>
<tr>
<td>N. B. Robins</td>
<td>Minersville, Penn</td>
</tr>
<tr>
<td>E. O. Robinson</td>
<td>Cliftondale, Mass</td>
</tr>
<tr>
<td>R. S. Royce</td>
<td>Lanesburg, Mass</td>
</tr>
<tr>
<td>B. S. Ryce</td>
<td>Meriden Conn</td>
</tr>
<tr>
<td>A. W. Scott</td>
<td>Bakersfield, Vt.</td>
</tr>
<tr>
<td>H. D. Sedgwick</td>
<td>Rochester, N. Y.</td>
</tr>
<tr>
<td>A. N. Seidel</td>
<td>Stony Run, Penn</td>
</tr>
<tr>
<td>J. W. Sheehan</td>
<td>North Creek, N. Y.</td>
</tr>
<tr>
<td>C. F. Sherman</td>
<td>Corinth, N. Y.</td>
</tr>
<tr>
<td>W. N. Simmons</td>
<td>Hartford, Conn</td>
</tr>
<tr>
<td>H. W. Small</td>
<td>Deer Isle, Me</td>
</tr>
<tr>
<td>C. A. Smith, Jr.</td>
<td>Woodstock, N. H.</td>
</tr>
<tr>
<td>E. A. Smith</td>
<td>Turbotville, Penn</td>
</tr>
<tr>
<td>J. C. Smith</td>
<td>Granville, N. Y.</td>
</tr>
<tr>
<td>D. N. Spaulding</td>
<td>Burlington, Vt.</td>
</tr>
<tr>
<td>F. B. Sprague</td>
<td>Providence, R. I.</td>
</tr>
<tr>
<td>A. C. Stewart</td>
<td>Arlington, Vt.</td>
</tr>
<tr>
<td>R. O. Stoddard</td>
<td>Shelburne, Vt.</td>
</tr>
<tr>
<td>G. C. Stout</td>
<td>Bethlehem, Penn</td>
</tr>
<tr>
<td>A. L. Stowell</td>
<td>Peru, Mass</td>
</tr>
<tr>
<td>S. Strock</td>
<td>E. Stroudsburg, Penn</td>
</tr>
<tr>
<td>J. S. Swartzwelder</td>
<td>Rays Hill, Penn</td>
</tr>
<tr>
<td>D. P. Sweeney</td>
<td>New York City</td>
</tr>
<tr>
<td>H. E. W. Tamlyn</td>
<td>Wingham, Ont.</td>
</tr>
<tr>
<td>W. C. Thompson</td>
<td>Saratoga, N. Y.</td>
</tr>
<tr>
<td>W. H. Tukey</td>
<td>Damariscotta, Me</td>
</tr>
<tr>
<td>B. M. Turner</td>
<td>Gardner, Me</td>
</tr>
<tr>
<td>M. E. Varney</td>
<td>Dunham Basin, N. Y.</td>
</tr>
<tr>
<td>J. B. Waters</td>
<td>Waterville, Vt.</td>
</tr>
<tr>
<td>C. L. Webster</td>
<td>Nashua, N. H.</td>
</tr>
<tr>
<td>J. F. Weeks</td>
<td>S. Dartmouth, Mass</td>
</tr>
<tr>
<td>W. W. Wellington</td>
<td>Milford, Mass</td>
</tr>
<tr>
<td>R. E. Wheelan, Ph. G</td>
<td>Youngstown, Ohio</td>
</tr>
<tr>
<td>R. C. White</td>
<td>Williamsville, Vt.</td>
</tr>
<tr>
<td>W. J. Whiteford</td>
<td>Schoharie, N. Y.</td>
</tr>
<tr>
<td>J. E. Wiley</td>
<td>Andover, N. B.</td>
</tr>
<tr>
<td>A. H. Wright</td>
<td>Hollis, N. H.</td>
</tr>
<tr>
<td>L. Ygaravidez</td>
<td>Porto Rico, W. I</td>
</tr>
<tr>
<td>A. J. Young</td>
<td>Thurman, N. Y.</td>
</tr>
</tbody>
</table>
THE FOLLOWING QUESTIONS WERE GIVEN TO THE CANDIDATES FOR GRADUATION IN THE WRITTEN EXAMINATIONS, SESSION OF 1889:

The examinations in Obstetrics were conducted orally and upon the Manikin.

The examinations in Anatomy were conducted upon the Cadaver.

The examinations in Chemistry were partly written and partly by laboratory work in analysis.

---

EXAMINATIONS IN

PHYSIOLOGY AND MICROSCOPIC ANATOMY.

PROF. J. HENRY JACKSON.

HISTOLOGY.

1. The blood and blood vessels. Give their microscopic appearance and structure.
2. Describe a striated muscle fibre and a motor nerve fibre, and the relation of one to the other.
3. Explain the minute structure of a pulmonary lobule, and a hepatic lobule.

PHYSIOLOGY.

4. Define physiology, mammalia, vertebrae, protoplasm, tissue, food, secretion and excretion.
5. Name the chemical elements which enter into the formation of the human body.
6. Classify the proximate principles.
7. Through what media do rays of light pass, in the special sense of vision, where is the image of an object first formed, to what portion of the cerebrum is it conveyed, and by what nerve?
8. What is the name, origin, distribution and function of the tenth cranial nerve?
9. Trace the blood from the right auricle to the aorta, name the valves which it passes, and the changes which it undergoes.
10. What daily rations are allowed the U. S. soldier, and what substances are changed in the mouth, what in the stomach, and what in the duodenum, and how?

---

EXAMINATION IN CHEMISTRY AND TOXICOLOGY.

PROF. R. A. WITTHAUS.

1. What is the weight of a cube of platinum (sp. gr.—21.5) each of whose sides measures a square centimetre?
2. Name the products of electrolysis of HCl, of H₂O, and of H₃N. State which is liberated at each pole and in what relative volumes. Describe the decomposition of K₂SO₄ by electrolysis.

3. Write the equations representing the reactions between:
   1. Sulphuric acid and barium chloride; 
   2. Calcium chloride and silver nitrate; 
   3. Potassium hydrate and cupric sulphate; 
   4. Monosodic carbonate and nitric acid. Underline the formulæ of insoluble compounds formed.

4. Give the formula of arsениuretted hydrogen. Under what circumstances is it formed? How is it influenced by red heat? What are the products of its combustion?

5. Give the chemical names and formulæ of King's yellow, oil of vitriol, aqua fortis, white vitriol, green vitriol, blue vitriol, calomel, corrosive sublimate, Epsom salt and plaster of Paris.

6. How do CO and CO₂ differ in their actions upon the animal economy, and why?


8. Describe tests for mercurious and murcuric compounds.

---

EXAMINATION IN
MATERIA MEDICA AND THERAPEUTICS.

PROF. J. H. WOODWARD.

1. What is an Extract?

2. Taking the dose for an adult as the standard, how would you calculate the dose for a child?

3. Give the Latin name and the dose of each of the following drugs:
   Aromatic Sulphuric Acid; Aromatic Spirits of Ammonia; Tincture of Aconite; Fluid Extract of Digitalis; Corrosive Sublimate; Calomel; Fowler's Solution; Sulphate of Quinine; Pargoric; Carbonate of Magnesium.

4. State the local Physiological effects of Quinine on the Stomach and on the Blood.

5. Mention the Therapeutic uses of Tinctura Ferri Chloridi.

6. State the Physical appearance, the Dose, the Physiological effects and the Therapeutic uses of Ammonii Carbonas.

7. Mention the accidents that may occur during anaesthesia by Ether; and give the treatment of each.

8. How would you treat profuse sweating in Phthisis?
9. Write a prescription to be used in the first stage of Acute Bronchitis.
10. Write a prescription for a mixture to be used in Acute Cystitis.

---

**EXAMINATION IN THEORY AND PRACTICE.**

**Prof. A. P. Grinnell.**

1. Describe Croupous Pneumonia, and give Physical signs in each stage.
2. Give the differential diagnosis between Cancer and Ulcer of the Stomach.
3. Give the differential diagnosis between Scarlatina and Rubeola.
6. Where and when is an Aortic regurgitant murmur heard?
7. Give the differential diagnosis between Cerebral Apoplexy and Opium Poisoning.
8. Define Landry's Paralysis and Leukocythaemia.
9. What is Anasarca and Ascites? Give causes of each.
10. When disease supervenes after a dangerous wound, and the patient dies, what is required and expected of the doctor in a medico-legal investigation?

---

**EXAMINATION IN SURGERY.**

**Prof. A. M. Phelps.**

1. What are the most important means of arresting haemorrhage?
2. What causes prevent the healing of wounds?
3. What general rule would you follow in treating wounds, and how would you dress them?
4. A person falls in the street and produces a compound fracture of the femur, what would you do: describe each step of your work.
5. What are the general rules to be followed in the treatment of all fractures of the long bones?
6. How would you treat simple or compound fractures of the skull not implicating the base?
7. What general rules would you follow in treating inflamed joints?
8. Differentiate between inguinal hernia, varicocele, and hydrocele.
Mr. President and Members of the Vermont State Medical Society:

Your delegates appointed to attend the examination of candidates for the degree of M. D., as conducted by the Medical Faculty of the University of Vermont, devoted two days, July 10th and 11th, to the performance of said duties. The examinations of Professors Towles and King were oral, and were conducted in such a manner as to show the real knowledge the candidate had of the subject, and that if he passed, it must be on his own merit.

The examinations of the other professors were all written, but the papers were placed at the disposal of your delegates, who had all the opportunity desired to examine them, and the markings by the professors. The examinations were difficult yet very practical, and of such a nature as to place a candidate on his own footing, to stand or fall according to his own ability. The markings of the professors were close in all subjects, and the men of '89 who passed the examinations and obtained their degree, stand in high esteem with your delegates.

It has been a pleasant task for us, who are of the Alumni of this College, to return after several years of practice and participate in the examinations of the class.

It is with pleasure that we note the enlarged advantages and increased facilities secured to the College by the new College Building and the Mary Fletcher Hospital. It is our opinion that the instruction given students by the Medical Faculty of the University of Vermont is of a high order; that it is as complete as it is possible to be in the time allowed, and that it is fully abreast of the medical knowledge of the day.

Respectfully submitted,

JOEL ALLEN, M. D.,
A. L. BINGHAM, M. D.
Delegates.

Medical Alumni Association.

Graduates of the Medical Department are earnestly requested to forward their names, residences, post-office address, and other items of personal interest to the undersigned.

The payment of one dollar entitles you to membership, and you will be furnished with a copy of the Annual and General Catalogue.

DR. C. P. THAYER, Burlington, VT.
BOARD OF TRUSTEES.

MATTHEW HENRY BUCKHAM, D. D.,
President.

His Excellency, WILLIAM P. DILLINGHAM,
Ex-Officio.

Governor of the State.

ON THE PART OF THE UNIVERSITY OF VERMONT:

Hon. WORTHINGTON CURTIS SMITH, St. Albans.
Hon. HOMER NASH HIBBARD, LL. D., Chicago, Ill.
Hon. GEORGE GRENVILLE BENEDICT, A. M., Burlington.
Hon. WILLIAM GOODHUE SHAW, A. M., Burlington.
Hon. HORACE HENRY POWERS, A. M., Morrisville.
Hon. TORREY ENGLESBY WALES, A. B., Burlington.
ELIAS LYMAN, A. M., Burlington.
Hon. EDWARD JOHN PHELPS, LL. D., Burlington.

ON THE PART OF THE STATE AGRICULTURAL COLLEGE:

Hon. CROSBY MILLER, Pomfret.
Hon. REDFIELD PROCTOR, A. M., Proctor.
Hon. EBENEZER J. ORMSBEE, A. M., Brandon.
Hon. ROSWELL FARNHAM, A. M., Bradford.
Hon. HENRY DWIGHT HOLTON, A. M., M. D., Brattleboro.
Hon. JOSIAH GROUT, Derby.
Hon. JUSTIN SMITH MORRILL, LL. D., Strafford.
Rev. HOWARD FREMONT HILL, Ph. D., Montpelier.
Hon. ALVIN B. FRANKLIN, Newfane.

GEORGE GRENVILLE BENEDICT, A. M., Secretary.
HENRY ORSON WHEELER, A. B., Treasurer, 184 College St.

EXECUTIVE COMMITTEE.

MATTHEW HENRY BUCKHAM,
GEORGE GRENVILLE BENEDICT,
WILLIAM GOODHUE SHAW,
HORACE HENRY POWERS.

FINANCE COMMITTEE.

JUSTIN SMITH MORRILL,
WILLIAM GOODHUE SHAW,
TORREY ENGLESBY WALES.
UNIVERSITY OF VERMONT.

Instruction is given in the University of Vermont in three departments, viz:

THE DEPARTMENT OF ARTS,
THE DEPARTMENT OF APPLIED SCIENCE,
THE DEPARTMENT OF MEDICINE.

The first of these comprises the usual College Course in Languages, Mathematics, Physical Sciences, Mental, Moral and Political Philosophy, Rhetoric, Literature and History, and leads to the degree of Bachelor of Arts.

The second is subdivided into Courses in Civil Engineering, Chemistry and Agriculture, and leads to corresponding degrees.

Students have full liberty to elect their courses, but, beyond this, options are not allowed to those who may be candidates for a degree, except that, to a limited extent, equivalent substitutions may be made by express permission of the Faculty.

The degree of Doctor of Philosophy will be conferred upon the satisfactory completion of a prescribed post graduate course in art or science.

The University has a Military Department, which is under the charge of a United States officer.

Candidates may be admitted to the Academical Department without examination if they bring certificates from reputable Preparatory Schools whose courses of study fully meet the requirements for admission, but students so admitted are on probation during the first term.

All the courses in the Academic and Scientific Departments are open to young women upon the same conditions as to young men. The young women are required to room and board in private families approved by the Faculty.

Scholarships, cancelling tuition, have been established for the benefit of young men of limited means to the Academical Department.

Two Reading Rooms are maintained, one for the gentlemen and one for the ladies. These are supplied with the leading scientific and literary journals of Europe and America.

The University enjoys unusual facilities for securing employment for students in the Engineering Department, both during the course and after its completion.

The laboratory, lately reconstructed, affords the amplest facilities for analytical work. Medical students, or persons who intend to engage in Pharmacy, may take a special Laboratory Course.

Furnished dormitories are rented to Academical students at from $18 to $25 per annum, including care. Table board may be had for $2.50 to $3.00 per week.

For further information or catalogues, address

M. H. BUCKHAM, President.