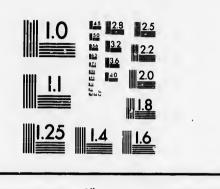


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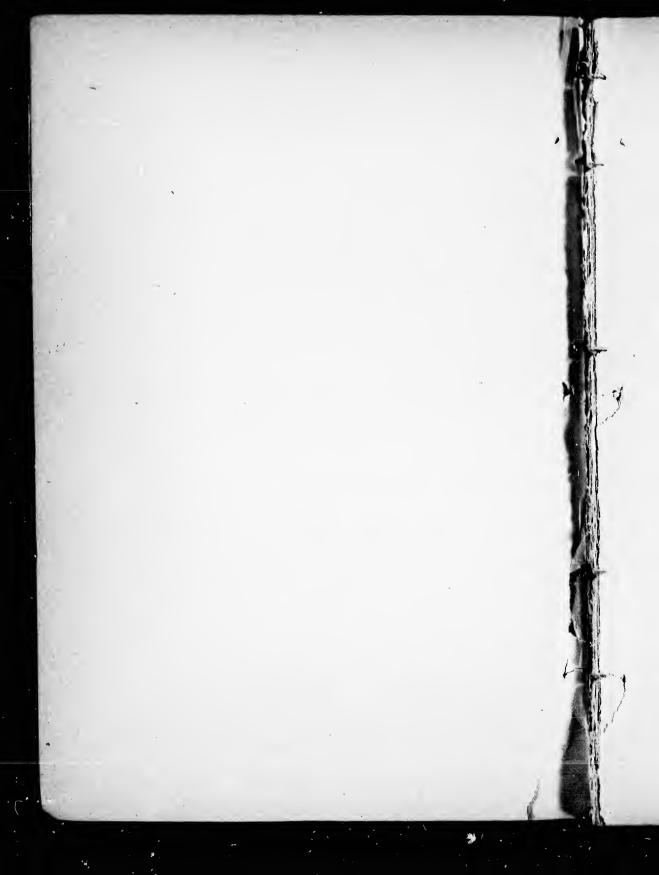
# Correspondence University

Announcement for 1884

FANUARY







The

# Correspondence University

Announcement for 1884

FANUARY

Applications for instruction must be addressed to the Secretary, Lucien A. Wait, Ithaca, N. Y. Copies of this Announcement may be obtained of the Secretary. New editions will be issued at intervals during the year.

The Correspondence University is an association of experienced instructors, who have been carefully selected, not only for their knowledge of the subjects assigned to them, but for their skill and ability in teaching. Its purpose is to enable students to receive at their homes systematic instruction, at a moderate expense, in all subjects which can be taught by means of correspondence; whether the studies be collegiate graduate or professional, or preparatory for the higher institutions of learning.

As the Correspondence University is designed to supplement the work of other educational institutions, by instructing persons who from any cause are unable to attend them, it hopes to be cordially welcomed by the authorities of the schools and colleges in the United States and Canada. It is not to be conducted for or against the interests of any other organization, but its members desire to be helpful to all. It will doubtless stimulate to methodical study persons who otherwise might find no opportunity for intellectual work, and is thus likely to increase the number of worthy applicants for admission to good schools. Instructors will always be selected for their special qualifications, without regard to the institutions with which they happen to be connected.

Those whom it is intended directly to benefit are: (1) persons engaged in professional studies which can be taught by correspondence; (2) graduates doing collegiate or advanced work; (3) underteachers in the various schools and colleges; (4) those preparing for college, either by themselves or at schools where instruction is not given in all branches; (5) members of cultivated families that are obliged to live in remote localities; (6) officers and men in the United States army or navy; (7) persons who intend to try any of the civil service examinations; (8) young men and women in stores or shops, or on farms, who are desirous to learn, but cannot leave their labors to attend school; and, finally, those in any walk of life who would gladly take up some study under competent private guidance.

Informal examinations by correspondence will be held at intervals by each instructor, at his discretion; they will involve no extra expense and will be required of every student. Besides the above, Pass and Honor examinations will be held, open to such students as desire to take them, on payment of the fees named below. The pass examinations, at the end of a course in any subject, will be conducted by the instructors in charge; the honor examinations, on the first Wednesday in December of each year (beginning in 1884), will be conducted by distinguished specialists who have had no share in the instruction of the students. The pass and honor examinations will be written in the presence of some gentleman of high character who resides near the

person examined; and certificates, signed by the examiner, will be given to those who succeed in them.

The fee for four weeks' tuition in any study of the grade required for admission to a college or scientific school, and in some collegiate studies, will be six dollars and thirty-five cents, payable in advance.

The fee for four weeks' tuition in studies of an advanced grade will be eight dollars and thirty-five cents, payable in advance.

For a pass examination, including the certificate of passing, the fee will be the same as for four weeks' tuition in the study concerned; for an honor examination and certificate the fee will be ten dollars.

The above mentioned fees do not include text-books, nor special notes and commentaries of instructors which have to be printed or otherwise reproduced. Text-books will be sent to students, free of postage, on remitting the retail price to the Secretary.

Teachers and students, not wishing to take a systematic course of instruction, but desirous of occasional assistance on points of special difficulty in any subject, will receive the needed help on application to the Secretary. Manuscript intended for publication will be revised and criticised. The fee for services of this class will be from one dollar upwards, according to the extent and importance of the work, as estimated by experts on submission of the subject matter.



SCIENCE



# WILLIAM J. BEAL, A.M., M.S., PH.D.

Professor of Botany and Forestry in the MICHIGAN AGRICULTURAL COLLEGE.

### GRADUATED

At the University of Michigan in 1859 with the degree of Bachelor of Arts.

At the Lawrence Scientific School of Harvard University in 1865 with the degree of Bachelor of Science.

### Mr. Beal has taught

Two years, by lecturing, at academies and colleges in and near Chicago. Three years in the Chicago University.

Thirteen years in the Michigan Agricultural College.

For three years the first President of the Society for the Promotion of Agricultural Science. For two terms Secretary of the American Pomological Society. For one year Chairman of the section in Biology, A. A. A. S.

Five of Mr. Beal's pupils in the subject of Grasses and Clovers have since become Professors of Agriculture in as many different states.

#### Publications.

Numerous articles in Scientific and Agricultural Periodicals, including a lecture on The New Botany, or the Best Methods of Teaching Botany, which has been printed in a 2d ed. In preparation: A work on Grasses and Clovers, for Students and Farmers.

Mr. Beal will give instruction, by correspondence, in Grasses and Clovers for Meadows and Pastures.

(1) A Plan for studying the Grasses and Clovers. Text-books: Gray's Manual of Botany; J. S. Gould in the N. Y. Agricultural Report for 1869; Flint's Grasses and Forage Plants.

(2) Special Topics for Investigation: such as the extent of Roots, Provisions for enduring Dry Weather, Testing seeds, different Modes of Seeding, Kinds of Grasses for different Localities and Soils, Management of Pastures and Meadows, Effect of various Fertilizers on any Grass or Clover. Books of reference: Journal of the Royal Agricultural Society; the U. S. Agricultural Reports for 1878, '79, '80, '81, '82; The Farmer's Book of Grasses, by Professor D. L. Phares of the Mississippi Agricultural College. References to other special works will be furnished to students.

The fee for four weeks' tuition is \$6.35.

# ISAAC P. ROBERTS, M.AGR.

### Professor of Agriculture in the

### CORNELL UNIVERSITY.

### Mr. Roberts has taught

Three years in the Iowa State Agricultural College. Nine years in the Cornell University.

#### Publications.

A Treatise on Agricultural Colleges, Cyclopaedia of Education, Kiddle & Schem, 1877. Development of American Agr:culture, Encyclopaedia Britannica, 1883.

Regular contributor to the Rural New Yorker, American Agriculturist, and other periodicals.

# Mr. Roberts will give instruction, by correspondence, in the following subjects:

(1) Wheat—Culture, varieties, preparation of the soil, seeding, injurious insects, harvesting, threshing, and marketing.

(2) Farm Buildings—Location, plans, material, construction, repairs and preservation, contracts, liabilities of contractors. Fences and gates—construction and repairs.

(3) Farms—Selection and purchase with regard to markets, agricultural capabilities, roads, improvements, schools, society. Titles, deeds, judgments, and mortgages. Farm Drainage—mapping of drains, material, construction, utility and care. Fields—shape and size.

(4) Farm-yard Manures—Composition, manufacture, preservation, application. Commercial Fertilizers—composition, application. Weeds and their eradication.

(5) Corn, oat, barley, and flax culture, treated the same as under (1).

(6) Plows and Plowing-Farm Implements and Machinery, use, care, and repairs.

Sheep Husbandry, treated in detail as below (7).

- (7) Principles of Stock-breeding—Law of similarity, of variation as caused by food, habit and climate, atavism, relative influence of male and female, prepotency, sex, in-and-in-breeding; Races and Breeds; Pedigrees. With the above will be given the history, markings, characteristics, adaptation to uses, soil, climate and locality of any one of the leading breeds.
- (8) The Horse; treated in detail as above (7). Education, care, driving, stables.
  (9) Buying, breeding, feeding, and management of cattle for butter, cheese, and milk dairies and beef production. Breeding, exhibition, care, and sale of thoroughbreds.
- (10) Swine—The breeding of thoroughbreds, history of breeds, markings, characteristics, adaptation to soil, climate, and locality, feeding, general management and care, piggeries.

(11) Farm Accounts—Business customs, rights and privileges; Notes, contracts, and obligations; Employment and direction of laborers.

The fee for four weeks' tuition in any of the above subjects is \$6.35.

## WILLIAM C. ESTY, A.M.

### Professor of Mathematics and Astronomy in

### AMHERST COLLEGE.

#### GRADUATED

At Amherst College in 1860 with the degree of Bachelor of Arts.

Studied one year with Professor Benjamin Peirce

#### Mr. Esty has taught

Twenty-one years in Amherst College.

He will give instruction, by correspondence, in College Astronomy, and in Spherical and Practical Astronomy.

For College Astronomy the text-book is Loomis' or Godfray's; the student should be prepared in Plane and Spherical Trigonometry: for Spherical and Practical Astronomy the text-book is Loomis' or Chauvenet's, and the student should be prepared in Plane and Spherical Trigonometry, Analytical Geometry, and Calculus.

The fee for four weeks' tuition in either subject is \$8.35.

## WILLIAM R. DUDLEY, M.S.

Assistant Professor of Botany in the

### CORNELL UNIVERSITY.

#### GRADUATED

At the Cornell University in 1874 with the degree of Bachelor of Science; in 1876 with the degree of Master of Science.

### Mr. Dudley has taught

Nine years in the Cornell University.

Professor of Botany in the Martha's Vineyard Summer Institute in 1878 and 1879.

Contributor to the Torrey Bulletin and the Botanical Gazette.

Mr. Dudley will give instruction in Botany, by correspondence, as follows:

(1) Two independent Elementary Courses.

a. Structural and Physiological Botany, leading up to, and including instruction in the Analysis of Plants. Text-books: Gray's Manual and Lessons, and Gray's Botanical Text-book, 5th ed.

b. General course: for those who wish to gain a knowledge of the general principles of Botany, of the Histology and Life of Plants, and of the Structure and Classification of the Larger Groups. Text-books: Bessey's Botany; Sachs' Text-book in Botany, 2d Eng. ed.; Darwin's Insectivorous Plants; Darwin's Cross and Self Fertilization.

(2) Instruction in Special Groups of Plants: for those who have studied the structure of the common Phanerogams, and wish to take up the Gramineæ and Cyperaceæ, or the Higher Cryptogamia (Ferns, Mosses, etc.). The student should have previously taken a good general elementary course in Botany. Systematic courses of reading, and of dissections and drawings of typical plants, will be called for. In connection with the work on the above-named groups, the instructor freely offers assistance in the determination of species.

Text-books for the Gramineæ and Cyperaceæ are: Gray's Manual and Flint's Grasses; for the Higher Cryptogamia, L. M. Underwood's Native Ferns and Allies, G. E. Davenport's Manual of Ferns of the U. S. (in prep), and James and Lesquereux' Manual of Mosses of the Northern States.

orthern States. Of the books named above, those printed in Italics are useful but not indispensable.

The fee for four weeks' tuition in either of the elementary courses is \$6.35; in the advanced course, \$8.35.

## WILLIAM TRELEASE, B.S.

Professor of Botany in the

### UNIVERSITY OF WISCONSIN.

One of the editors of Psyche, and contributor to Science.

### GRADUATED

At the Cornell University in 1880 with the degree of Bachelor of Science.

#### Mr. Trelease has taught

Two terms in the Cornell University.

Two years in the University of Wisconsin.

Had charge of the Harvard Summer School of Botany in 1883. Lecturer on Botany at the Johns Hopkins University, 1883-84.

#### Publications.

A translation of Poulsen's "Botanical Micro-Chemistry." On the Nature and Uses of Nectar; published in Comstock's Report on Cotton Insects. Articles in the Naturalist, Bot. Gazette, Proceedings of the Boston Society of Natural History, Psyche, Science, Torrey Bulletin, Just's bot. Jahresbericht, American Bee Journal, etc.

Mr. Trelease will give instruction, by correspondence, in Fungi, with incidental work on Algæ and Lichens.

The student should be prepared in Theoretical and Practical Microscopy, and German. A knowledge of French is desirable but not absolutely necessary. He should also understand the elements of phænogamic botany. The text-books are: Luerssen's Handbuch der system. Botanik, Bd. I; Cooke's Handbook of British Fungi; Winter's "Pilze" in Rabenhorst's "Kryptogamen-Flora"; Farlow's Cryptogamic Botany, to be published soon.

Specimens for study are furnished to the student from the Instructor's herbarium, to be sketched and described according to the directions accompanying them. They may afterwards be kept to form the framework of an herbarium in which specimens of the student's own collecting will be arranged, after they have been studied in the same manner and subsequently examined by the Instructor to secure their correct determination. Systematic courses of reading are given in connection with this work. Students who cannot give two hours a day to the study for at least three months, are advised to limit their work to some one group, such as the rusts, smuts, or rots among the fungi parasitic upon higher plants.

The fee for four weeks' tuition is \$8.35.

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# LIBERTY H. BAILEY, JR., B.S.

Assistant in the Gray Herbarium of

# HARVARD UNIVERSITY.

### GRADUATED

At the Michigan Agricultural College in 1882, with the degree of Bachelor of Science.

Contributor to the Botanical Gazette, Torrey Bulletin, and other periodicals.

He will give instruction, by correspondence, in Taxonomy and Phytography, as follows:

(1) A course in advanced Taxonomy. The student must have a knowledge of the natural system of classification, and must be familiar with the arrangement in Gray's Manual, or some other recent system-

This course will include exercises in grouping and comparing species and genera. Species atic work. of plants not included in our Floras, and representing important parts of genera, will be furnished the student when sufficiently advanced, to be disposed by him into natural groups, with proper characterizations. He will also be required to denote critical points of affinity or difference between species furnished, and unknown specimens will be disposed into provisional genera, sub-genera, or species upon his judgment. This will involve limits of species, hybrids, etc. In connection with some branches of phytography, viz.: drawing up descriptions and characters, the study will have to do with comparative morphology.

(2) An independent course in Phytography, or practice in describing and characterizing species and genera, including a discussion of the rules of nomenclature adopted by the Botanical Congress in 1867.

### Identification.

Mr. Bauey will also name and give occasional critical notes on complete specimens of pressed plants sent for examination. Prices will be named on submittal of the work.

The fee for four weeks' tuition in either of the courses is \$8.35.

# EDWIN C. CLEAVES, B.S.

Associate Professor of Freehand and Mechanical Drawing in the CORNELL UNIVERSITY.

### GRADUATED

At the Worcester Free Institute in 1873 with the degree of Bachelor of Science.

Mr. Cleaves has taught

Ten years in the Cornell University.

Publications.

Outlines and Relief Designs in Krusi's Advanced Course in Drawing.

Mr. Cleaves will give instruction, by correspondence, in Freehand Drawing and in Perspective.

The method of instruction is by practical exercises, and notes. The course in *Drawing* is progressive in its arrangement, and designed for those who wish to become familiar with the fundamental principles of the subject and to prepare themselves for advanced work in the higher departments of Art. The subject of *Perspective* will be treated scientifically, and it is desirable that those who take this course should be prepared in the elements of Geometry.

As the desired proficiency depends largely upon practical work, the student should devote at least two hours a day or ten hours a week to the exercise.

The fee for four weeks' instruction in either subject is \$6.35.

# CHARLES L. CRANDALL, C.E.

Assistant Professor of Civil Engineering in the

### CORNELL UNIVERSITY.

### GRADUATED

At the Cornell University in 1872 with the degree of Bachelor of Civil Engineering; in 1876 with the degree of Civil Engineer.

Mr. Crandall has taught

Nine years in the Cornell University.

He will give instruction, by correspondence, in the following subjects:

(1) Linear Drawing. No text-book required.

(2) Land Surveying. Gillespie's text-book. The student should be prepared in Trigonometry.

(3) Roof Stresses and Construction. Greene's text-book. The stu-

dent should be prepared in Drawing and Trigonometry.

(4) Bridge Stresses and Construction. Greene's text-book. The student should be prepared in Mechanics (including strength and flexure of beams), Drawing, and Trigonometry.

The fee for four weeks' tuition in courses (1) and (2) is \$6.35; in courses (3) and (4), \$8.35.

# JOHN P. DAVIS.

Member of the Society of American Wood Engravers and of the Art Students' League.

Teacher of Engraving in the Woman's Art School, Cooper Union, and Superintendent of the Engraving Department of Frank Leslie's Publishing House.

He will give instruction, by correspondence, in Wood-Eugraving.

The fee for four weeks' tuition is \$8.35.

### JAMES BRATTLE BURBANK.

Captain 3d U. S. Artillery, and Brevet Major.

Professor of Military Science and Tactics in the Cornell University from 1877 till 1883.

Major Burbank will give instruction, by correspondence, in Military Science, as partially outlined under the following heads:

- (1) General conditions governing modern warfare.
- (2) The development of standing armies.
- (3) Ideas governing the operations of armies at the present day.
- (4) Theatre of war.
- (5) Grand tactics.
- (6) Bases of operation and their necessity.
- (7) Lines of operation.
- (8) Supply of armies in the theatre of war.
- (9) General suggestions regarding the study of campaigns.
- (10) Organization of armies.

The course has been arranged to meet the wants of certain classes of students by whom the need of some sound general knowledge of Military Science, not too technical, has long been felt. To those engaged in historical investigation, or in the study of political and social science, and to readers of history in general, the course will be found of value, in enabling them to follow understandingly the narratives of those national conflicts which are so prominent in all historical writings.

The fee for four weeks' tuition is \$8.35.

### MAX PIUTTI

Professor of Music in

### WELLS COLLEGE.

Studied at the Conservatories of Leipsic and Stuttgart from 1870 till 1873; at the University of Leipsic from 1870 till 1872, and in 1882 and 1882.

Mr. Piutti has taught Nine years in Wells College.

He will give the following courses of instruction, by correspondence:

- (1) History of Music and Musical Criticism.
- (2) Harmony. Lessons based on methods of Tiersch and C. Piutti. The student must be prepared in musical notation, time, and tonality; the ability to play simple four-part songs on the piano-forte is desirable.
  - (3) An Advisory Piano Course.

Rapid and steady progress in piano playing is largely due to a judicious choice of studies and instructive compositions. Owing to the difficulty of selecting proper music, many players come to a stand-still, after their lessons have ceased, because they do not know what to play. Teachers, also, in small towns where there are few concerts, and where there is little competition and no stock of good new music at hand for examination, are apt to waste their own time and that of their pupils by an inappropriate choice of material for instruction. For such persons the Advisory Piano Course is designed; not to interfere with the instruction of good teachers, but to serve as a guide to all who need one; to assist in the choice of pieces; to point out special difficulties and means of conquering them; to advise in regard to the best editions of standard works; to aid even in the choice of instruments; in short, to give all possible assistance in the study of piano-playing.

The fee for four weeks' tuition in courses (1) and (2) is \$8.35; in course (3), \$6.35.

## BURT G. WILDER, B.S., M.D.

Professor of Physiology, Comparative Anatomy, and Zoology in the

### CORNELL UNIVERSITY.

#### GRADUATED

At the Lawrence Scientific School of Harvard University in 1862 with the degree of Bachelor of Science "in anatomia, summa cum laude."

At the Medical School of Harvard University in 1866 with

the degree of Doctor of Medicine.

### Dr. Wilder holds or has held the following positions:-

Assistant in Comparative Anatomy in the Museum of Comparative

Zoölogy at Harvard College from 1866 till 1868.

Lecturer on Comparative Anatomy of Vertebrates in the Anderson Summer School of Natural History on Penikese Island in 1873 and 1874.

Lecturer on Physiology in the Medical Department of the University of Michigan in 1876.

Professor of Physiology in the Medical School of Maine since 1875. Professor of Physiology, Comparative Anatomy, and Zoölogy in the Cornell University since 1868.

#### Publications.

Besides several unpublished papers read before the American Neurological Association and the American Association for the Advancement of Science, and two courses of lectures before the Lowell Institute of Boston (The Silk Spider of South Carolina, 1866, and Hands and Feet of Mammalia, 1872), Dr. Wilder has published the following:-

(1) Anatomical Technology as applied to the domestic cat: an introduction to human, veterinary and comparative anatomy, O., pp. 600, 150 figures. New York, 1883, (In con-

junction with Professor S. H. Gage).

(2) What Young People Should Know: the reproductive function in man and the lower animals. D., pp. 212, 25 figures. Boston, 1875. (3) Emergencies: how to avoid them and how to meet them; 16 mo., pp. 36, 3 figures.

(4) Health Notes for Students; 16 mo., pp. 58. New York, 1883.

About fifty scientific papers, chiefly on the brain, in Science, (1880, 1881), American Journal of Science, Am. Journal of New ology and Psychiatry, American Naturalist, Medical Record, New York Medical Journal, Boston Medical and Surgical Journal, Publications of the Massachusetts Medical Society, Archives of Laryngology, Boston Journal of Natural History, Memoirs of the Boston Society of Natural History, and Proceedings of the American Philosophical Society, Am. Association for Advancement of Science, Philadelphia Academy of Natural Sciences, Am. Academy of Arts and Sciences, and Boston Society of Natural History.

Also articles in the Atlantic Monthly, Harper's Magazine, the Galaxy, Old and New, the Popular Science Monthly, and Scrioner's Magazine, and numerous reviews in the

Nation.

Dr. Wilder will give instruction, by correspondence, in the following subjects:—

(1) Elementary Zoölogy of Vertebrates.

(2) Elementary (school) Physiology and Hygiene. Prerequisite: Elementary Zoölogy.

(3) Secondary (collegiate) Physiology. Prerequisites: Elementary Zoölogy, Physiology, Physios, and Chemistry. Text-books: Ashby's

Memoranda of Physiology; Martin's The Human Body.

(4) Anatomical Technology: the Methods of Anatomical Manipulation, and the fundamental facts of Mammalian Morphology as illustrated upon the Domestic Cat. (In conjunction with Mr. Gage, see p. I, 12).

Text-book: Wilder and Gage's Anatomical Technology.

(5) Vertebrate Types. Prerequisites: Anatomical Technology; Microscopical Technology and Vertebrate Histology. Text-books: McAlpine's Zoölogical Atlas; Martin and Moale's How to dissect a Chelonian and Bird; Huxley's Anatomy of Vertebrated Animals; various monographs.

(6) Comparative Anatomy of Vertebrates. Prerequisites: Anatomical Technology; Vertebrate Types; Human Anatomy; Microscopical Technology and Vertebrate Histology; Vertebrate Embryology. Text-books: Manuals of Huxley, Gegenbaur, and Owen, with various monographs.

(7) Human Anatomy. Prerequisite: Anatomical Technology. Text-books: The works of Quain, Harrison Allen, or Gray; Heath's

Practical Lnatomy.

In connection with the instruction in Human Anatomy and Physiology, Dr. Wilder will advise with students respecting more comprehensive courses preparatory to entering a medical school.

The fee for four weeks' instruction in Elementary Zoölogy or Physiology is \$6.35; in any of the other subjects, \$8.35.

## DAVID STARR JORDAN, M.D., PH.D.

Professor of Natural History in the

### UNIVERSITY OF INDIANA.

### GRADUATED

At the Cornell University in 1872 with the degree of Master of Science; at the University of Indiana in 1875 with the degree of Doctor of Medicine.

### Mr. Jordan has taught

Two years in the Cornell University. Four years in Butler University. Four years in the University of Indiana.

Also two summers in the Harvard Summer Schools at Penikese and Cumberland Gap.

Special agent of the U. S. Census Bureau of 1880, in charge of investigations of the Marine Industries of the Pacific Coast, and for some time Naturalist Associate of the U. S. Fish Commission and the U. S. National Museum.

#### Publications.

Manual of Vertebrates. Chicago: 1876, 1878, 1880: 500 pp.
Synopsis of the Fishes of North America. Washington: 1882: 1100 pp.

Also upwards of 300 technical papers and memoirs, chiefly on Ichthyology; relating to the marine fishes of California, Oregon, Washington, Mexico, Central America, Texas, Florida, and Carolina, and to the American fresh water fishes generally.

Mr. Jordan will give instruction, by correspondence, in the following subjects:

- (1) Systematic Ichthyology.—Text-books: Jordan and Gilbert's Synopsis of the Fishes of North America, and Günther's Guide to the Study of Fishes. Günther's Catalogue of the Fishes of the British Museum, and other works, will be needed by advanced students.
- (2) Systematic Herpetology.—Text-books: Jordan's Manual of Vertebrates, Boulenger's Catalogues of the Amphibia in the British Museum; Baird and Girard's Catalogue of N. Am. Serpents; Yarrow's Check List of N. Am. Reptiles.
- (3) Systematic Ornithology. Text-book: Coues' Key to North American Birds, with other works for advanced students.

The fee for four weeks' tuition in any of the above subjects is \$8.35.

# CHARLES SEDGWICK MINOT, S.B., S.D.

Lecturer on Embryology in the Medical School of

### HARVARD UNIVERSITY.

### GRADUATED

At the Massachusetts Institute of Technology, in the department of Chemistry, in 1872 with the degree of Bachelor of Science.

At Harvard University, in the departments of Physiology and Comparative Anatomy, in 1878 with the degree of Doctor of Science.

Has studied three years in Germany and France.

Dr. Minot has taught

Four years in Harvard University.

#### Publications.

Original Researches.—Eight articles on North American Lepidoptera; Influence of canaesthetics on the vaso-motor centres (with Dr. H. P. Bowditch), 1874; Recherches histologiques sur les Trachées de l'Hydrophilus piceus, 1876; Die Bildung der Kohlensäure innerhalb des ruhenden und des erregten Muskels, 1876; On the classification of some of the lower worms, 1876; Studien an Turbellarien, Beiträge zur Kenntniss der Platthelminthen, 1876; The sledge microtome, 1877; Recent investigations of embryologists, 1877; Experiments on tetanus, 1878; On Distomum crassicolle, with brief notes on Huxley's proposed classification of worms, 1878; Report on the fine anatomy of the locust, 1878; Growth as a function of cells, 1879; Preliminary notice of certain laws of histological differentiation, 1879; A sketch of Comparative Embryology, 1880; On the conditions to be filled by a theory of life, 1880; Studies on the tongue of reptiles and birds, 1880; Histology of the locust and the cricket, 1881; Is man the highest animal, 1881; Mounting chick embryos whole, 1881; Theorie der genoblasten, 1882; A criticism of Prof. Hubrecht's Hypothesis of development by primogeniture, 1883.

Lectures.—The Foetal envellopes, 1883; Retrogressive history of the Foetus, 1883.

Popular Articles.—A sketch of comparative Embryology, 1880; The lowest animals, 1880;

Popular Articles.—A sketch of comparative Embryology, 1880; The lowest animals, 1880; Changes in the circulation during cerebral activity, 1880; Human growth, 1880; Comparative Morphology of the ear, 1881-82; A grave defect in our medical education, 1881; Huxley's writings, 1881; Charles Robert Darwin, 1892; Namerous book reviews, 1877-1883.

Reports and Abstracts.—Reports on physiology in the Boston Medical and Surgical Journal; Abstracts on Histology, etc., in the Biologisches Centralblatt; Frequent abstracts in Science, etc.

Dr. Minot will give instruction, by correspondence, in the various branches of Embryology.

The fee for four weeks' tuition is \$8.35.

### J. HENRY COMSTOCK, B.S.

Professor of Entomology and General Invertebrate Zoology in the CORNELL UNIVERSITY.

United States Entomologist from 1879 till 1881.

### GRADUATED

At the Cornell University in 1874 with the degree of Bachelor of Science.

Mr. Comstock has taught
Eight years in the Cornell University.

#### Publications.

Notes on Entomology.

Report on Cotton Insects.

Reports of the Entomologist of the U. S. Department of Agriculture for 1879 and 1880.

Report on Insects for 1881; published in the U. S. Agricultural Report.

Monograph on the Diaspinae; published in Report of the Cornell University Experiment Station.

A fragment of a Guide to Practical Work in Elementary Entomology.

Numerous papers on Entomology, published in various Scientific and Agricultural Journals.

Mr. Comstock will give instruction, by correspondence, in Entomology; the fee for four weeks' tuition is \$8.35.

### SIMON HENRY GAGE, B.S.

Assistant Professor of Physiology, and Lecturer on Microscopical Technology, in the

### CORNELL UNIVERSITY.

### GRADUATED

At the Cornell University, in the department of Natural History, in 1877 with the degree of Bachelor of Science.

#### Mr. Gage has taught

Eight years in the Cornell University.

#### Publications.

Anatomical Technology, in connection with Professor Burt G. Wilder, 1882.

Fifteen scientific papers, about half of which are on Microscopical and Histological subjects; published in the Proceedings of the American Association for the Advancement of Science for 1879, 1880, 1883; in the Proceedings of the American Microscopical Society for 1882, 1883; in the American Naturalist for 1878 and 1880; in the American Quarterly

Science for 1879, 1880, 1883; in the Proceedings of the American Microscopical Society for 1882, 1883; in the American Naturalist for 1878 and 1880; in the American Quarterly Microscopical Journal, 1879; in the American Monthly Microscopical Journal and the American Journal of Microscopy and Popular Science for 1880.

Mr. Gage will give instruction, by correspondence, in the following subjects:

(1) The Microscope and Microscopical Methods, with especial reference to Animal Histology.

The student should have an elementary knowledge of Physics and Chemistry; and if Vertebrate Histology is to be studied especially, Anatomical Technology is recommended.

Text-books: For Animal Histology, Rutherford's Praetical Histology, 3d ed.; for Vegetable Histology, Poulsen's Botanical Micro-Chemistry, translated and edited by Professor Wm. Trelease; for Geology, Geike, Text-book of Geology.

(2) Anatomical Technology, in connection with Dr. Wilder, see p. 9, I, for requirements, etc.

The fee for four weeks' tuition is \$8.35.



MATHEMATICS



# BENJAMIN WILLIAMSON, M.A., F.R.S.

Fellow, Tutor, and Donegal Lecturer in Mathematics in Trinity College, Dublin. Examiner in the University of London.

Graduated as First Gold Medallist in Mathematics and Physics at the University of Dublin in 1849.

#### Publications.

A Differential and Integral Calculus.

The Article on Infinitesimal Calculus in the Encyclopaedia Britannica.

Several papers in the Quarterly Journal of Mathematics, etc.

Mr. Williamson will act as Honor Examiner in the Integral Calculus.

He will give instruction, by correspondence, with the assistance of Mr. McMahon (see p. VI, 1), in the Differential Jalculus.

Text-books of Williamson, Todhunter, and Bertrand. The student should be prepared in Plane and Solid Analytical Geometry.

# THOMAS MUIR, M.A., F.R.S.E.

Mathematical Master in the High School of Glasgow, and Mathematical Examiner for Degrees in the University of Glasgow.

#### GRADUATED

At Glasgow University in 1869 with the degree of Master of Arts.

Double First Prizeman in Mathematics while an Undergraduate.

#### Mr. Muir has taught

Two years in the College Hall, St. Andrews, Scotland. Three years in the University of Glasgow. Nine years in the High School of Glasgow.

#### Publications.

A Tract on Continued Fractions.

A Treatise on Arithmetic.

A Treatise on Determinants.

Numerous investigations in Pure Mathematics published in the Messenger of Mathematics, Quarterly Journal of Mathematics, Philosophical Magazine, Proceedings of the London Mathematical Society, Proceedings and Transactions of the Royal Society of Edinburgh, etc.

Mr. Muir will give instruction, by correspondence, in Determinants.

The text-book is Muir's. Beginners should be prepared in Algebra as far as Simultaneous Equations; students of the higher special forms, in advanced Algebra and the Differential Calculus.

# HENRY T. EDDY, M.A., C.E., Ph.D.

Professor of Mathematics, Civil Engineering, and Astronomy in the

#### UNIVERSITY OF CINCINNATI.

#### GRADUATED

At Yale College in 1867 with the degree of Bachelor of Arts. At the Sheffield Scientific School in 1868 with the degree of Bachelor of Philosophy.

Gold Medallist and First Prizeman in Mathematics at Yale College. Has Studied One Year in Germany.

#### Mr. Eddy has taught

One year in the University of East Tennessee. Four years in the Cornell University. One year in Princeton College. Eight years in the University of Cincinnati.

#### Publications.

A Treatise on Plane Analytic Geometry, Phila., 1874, 200 pp. Researches in Graphical Statics, New York, 1878, 122 pp. A Treatise on Thermodynamics, New York, 1878, 182 pp. Neue Constructionen aus der Graphischen Statik, Leipzig, 1880, 106 pp.

Mr. Eddy will give instruction, by correspondence, in the following subjects:

(1) Integral Calculus. Text-books of Todhunter and Williamson. The student should be prepared in Trigonometry, Plane Analytic Geometry, Differential Calculus, and Solid Analytic Geometry.

(2) Elementary Theory of Electricity and Magnetism. Cumming's text-book. The student should be prepared in Trigonometry, Plane Analytic Geometry, and Calculus.

(3) Analytical Statics. Todhunter's text-book. The student should be prepared in Plane and Solid Analytic Geometry, and Differential and Integral Calculus.

(4) Dynamics of Rigid Bodies. Routh's text-book. The student should be prepared in Plane and Solid Analytic Geometry, Differential and Integral Calculus, and Differential Equations.

(5) Analytical Theory of Heat. Fourier's text-book. The student should be prepared in Plane and Solid Analytic Geometry, Differential Equations, and Differential and Integral Calculus.

Of the requirements named above, those printed in Italics are useful but not absolutely necessary.

The fee for four weeks' tuition in any of the above subjects is \$8.35.

# FABIAN FRANKLIN, Ph.D.

Associate in Mathematics in the

#### JOHNS HOPKINS UNIVERSITY.

#### GRADUATED

At the Columbian University, Washington, D. C., in 1869 with the degree of Bachelor of Philosophy.

At the Johns Hopkins University in 1880 with the degree of Doctor of Philosophy.

Fellow of the Johns Hopkins University from 1877 till 1879.

Mr. Franklin has taught
Six years in the Johns Hopkins University.

#### Publications.

Bipunctual Coördinates (Amer. Jour. Math., Vol. I).

Generating Functions and Ground-forms of Binary Quantics (id., Vol. III).

Cubic Curves, (id., Vol. V).

Mathematical Notes (id., Vols. I-IV).

Sur le développement du produit infini (x-x)(x-x²)(x x²)... (Comptes Rendus, 1881).

Mr. Franklin will give instruction, by correspondence, in Modern Algebra. Text-book: Salmon's Modern Higher Algebra.

The subject should be taken up by those only who intend to make a special study of the highest departments of pure mathematics. A knowledge of Plane Analytic Geometry, the Differential Calculus, and the Theory of Equations is necessary; and an acquaintance with the Theory of Determinants is desirable. Those who have not this last must begin their course with some lessons in Determinants, which subject occupies the first chapters of the text-book; but students who are prepared in Determinants may omit these chapters.

# MRS. CHRISTINE LADD FRANKLIN, A.B.

#### GRADUATED

At Vassar College in 1869 with the degree of Bachelor of Arts.

Was at the Johns Hopkins University as a Fellow from 1879 till 1882.

Mrs. Franklin has taught eight years.

#### Publications.

The Pascal Hexagram (Amer. Jour. Math., Vol. II).

On DeMorgan's Extension of the Algebraic Processes (id., Vol. III).

On the Algebra of Logic (Studies in Logic by members of the Johns Hopkins University).

Contributions to the Analyst and Educational Times.

Mrs. Franklin will give instruction, by correspondence, in Theory of Equations and in Synthetic Geometry.

For Theory of Equations, a good course in Elementary Algebra (including the binominal theorem) is all that is essential, but a knowledge of Elementary Analytic Geometry is desirable. Text-book: Burnside and Panton's, and Todhunter's Theory of Equations.

Synthetic Geometry can be studied with profit only by advanced mathematical students. Text-book: Steiner, Synthetische Geometrie, or Chasles, Sections Coniques.

These text-books have not been translated into English.

The fee for four weeks' tuition in either of the above subjects is \$8.35.

# GEORGE WILLIAM JONES, A.M.

# Assistant Professor of Mathematics in the

#### CORNELL UNIVERSITY.

#### GRADUATED

#### At Yale College in 1859 with the degree of Bachelor of Arts.

#### Mr. Jones has taught

Five years in the Iowa State Agricultural College. Six years in the Cornell University.

#### Publications.

A treatise on Trigonometry in connection with Professors Oliver and Wait), Ithaca, 1881, New York, 1883, 103 pp.

A treatise on Algebra, Part I (in connection with Professors Oliver and Wait), Ithaca, 1882, 172 pp.

Mr. Jones will give instruction, by correspondence, in the following subjects:

- (1) Arithmetic. Wentworth and Hill's text-book. The student should be prepared in the elements.
  - (2) Plane Geometry. Chauvenet's text-book.
- (3) Solid Geometry. Chauvenet's text-book. The student should be prepared in Plane Geometry.
- (4) Conic Sections. Taylor's text-book. The student should be prepared in Plane and Solid Geometry.
- (5) Trigonometry. The unstarred portions of Oliver, Wait, and Jones' text-book. The student should be prepared in Algebra and Plane and Solid Geometry.
- (6) Trigonometry (honor course). Todhunter's, and the starred portions of Oliver, Wait, and Jones' text-book. The student should be prepared in the unstarred portions.

The fee for four weeks' tuition in any one of the first five subjects is \$6.35; in the Honor Course in Trigonometry, \$8.35.

# LUCIEN A. WAIT, A.B.

#### Associate Professor of Mathematics in the

#### CORNELL UNIVERSITY.

#### GRADUATED

At Harvard College in 1870 with the degree of Bachelor of Arts.

#### Mr. Wait has taught Thirteen years in the Cornell University.

He will give instruction, by correspondence, in the following subjects:

- (1) Algebra, through Quadratics. The student should be prepared in Arithmetic.
  - a Ordinary course: Wentworth's text-book.
  - b. Intermediate course: Todhunter's text-book.
  - c. Honor course: Todhunter's text-book,
- (2) Advanced Algebra. The student should be prepared in Algebra through Quadratics.
  - a. Ordinary course: Wentworth's text-book.
  - b. Intermediate course: Todhunter's text-book.
  - c. Honor course: Todhunter's text-book.
- (3) Plane Analytic Geometry (elementary course). Text-books of Todhunter and Salmon. The student should be prepared in Plane Trigonometry.
- (4) Solid Analytic Geometry (elementary course). Text-books of Aldis and Salmon. The student should be prepared in Plane and Spherical Trigonometry, and Plane Analytic Geometry.

The fee for four weeks' tuition in courses (1) c, (2) c, (3), and (4) is \$8.35; in the other courses, \$6.35.

# EDWARD W. HYDE, C.E.

Professor of Mathematics, and Instructor in Civil Engineering, in the

#### UNIVERSITY OF CINCINNATI.

#### GRADUATED

At the Cornell University in 1872 with the degree of Bachelor of Civil Engineering; in 1874 with the degree of Civil Engineer.

#### Mr. Hyde has taught

Two years in the Cornell University. One year in Chester (Pa.) Military Academy. Eight years in the University of Cincinnati.

#### Publications.

A treatise on the Advantages and Disadvantages of Different Methods of Construction of the Skew Arch.

Numerous investigations in Pure and Applied Mathematics, and in Engineering subjects, in the Analyst, the American Journal of Mathematics, and Van Nostrand's Magazine. See the first two periodicals for Mr. Hyde's treatment of Mechanics by Quaternions.

Mr. Hyde will give instruction, by correspondence, in the Directional Calculus; and in Descriptive Geometry, with its applications to Shades and Shadows, Perspective, and Stereotomy.

For the Directional Calculus, the student should be prepared in Algebra, Geometry, Trigonometry, Analytic Geometry, and the Differ-

ential Calculus. No text-book is required.

For Descriptive Geometry, if the student has French, the text-book will be Leroy's Géométrie Descriptive. The applications named above are not to be taken till the subject itself is finished; and for all of them, except Perspective, the student must have French. A knowledge of Algebra, Geometry, and Trigonometry is also required.

The fee for four weeks' instruction in either subject is \$8.35.

# OSCAR H. MITCHELL, PH.D.

Professor of Mathematics in

#### MARIETTA COLLEGE.

#### GRADUATED

At Marietta College in 1875 with the degree of Bachelor of Arts.

At the Johns Hopkins University in 1882 with the degree of Doctor of Philosophy.

Fellow of the Johns Hopkins University from 1879 till 1882.

#### Mr. Mitchell has taught

Three years in the Marietta High School. One year in Marietta College.

#### Publications.

On Binomial Congruences, Am. Jour. Math., Vol. III.

Some Theorems in Numbers, Id., Vol. IV.

Note on Determinants, Ibid.

On A New Algebra of Logic, in Studies in Logic by Members of the Johns Hopkins University.

Mr. Mitchell will give instruction, by correspondence, in the following subjects:

(1) The Theory of Numbers. Text-books: Serret's Cours D'Algèbre Supérieure, Dirichlet's Zahlentheorie, or Bachmann's Kreistheilung. For any who read neither French nor German a course of experimental research will be marked out in which the student will be led to discover for himself many of the elementary theorems in numbers. This kind of study, though not conducive to rapid advancement, is believed to be of the highest disciplinary value.

(2) The Algebra of Logic. Text-books: Boole's Laws of Thought, Studies in Logic by Members of the Johns Hopkins University, or the Treatise on Logic soon to be published by Prof. C. S. Pierce.

The fee for four weeks' tuition in either of the above subjects is \$8.35.

# CHARLES A. VAN VELZER, B.S.

Assistant Professor of Mathematics in the

#### UNIVERSITY OF WISCONSIN.

Member of the London Mathematical Society.

#### GRADUATED

At the Cornell University in 1876 with the degree of Bachelor of Science.

Fellow of the Johns Hopkins University from 1878 till 1881.

Mr. Van Velzer has taught

One year in the Cornell University.

Two years in the University of Wisconsin.

Mr. Van Velzer will give instruction, by correspondence, in Differential Equations and Theory of Functions.

The text-book in *Differential Equations* is Roole's; in *Theory of Functions* no text-book is required. For either subject the student should be prepared in Trigonometry, Plane Analytic Geometry, the Differential Calculus, and the Integral Calculus; Solid Analytic Geometry is useful, but not absolutely necessary.

The fee for four weeks' tuition in either subject is \$8.35.

# GEORGE BALLARD MATHEWS. B.A.

Scholar of St. John's College, Cambridge.

Senior Wrangler in the Mathematical Tripos of 1883.

Mr. Mathews will give instruction, by correspondence, with the assistance of Mr. Wait (see p. II, 7), in Modern Higher Analytical Geometry.

Text-books of Todhunter, Salmon, Ferrers, and Whitworth. The student should be prepared in Trigonometry.



CLASSICS



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# ISAAC FLAGG, PH.D.

Professor of the Greek Language and Literature in the

#### CORNELL UNIVERSITY.

#### GRADUATED

At Harvard College in 1864 with the degree of Bachelor of

At the University of Göttingen in 1871 with the degree of Doctor of Philosophy.

Valedictorian at Phillips Andover Academy in 1860, and Bowdoin Prizeman in Lattrand Greek Composition at Harvard College in 1863 and 1864.

#### Mr. Flagg has taught

Four years in Harvard College, as tutor in Greek. Twelve years in the Cornell University.

The Intercollegiate Literary Association, at the contests of 1875 and 1876, held in New York City, awarded the first prize in Greek to students of the Cornell University, pupils of Mr. Flagg.

#### Publications.

An Analysis of Schiller's Brant von Messina, after Aristotle's Poetic; with appendix of Greek verse. Göttingen, 1871.

The Hellenic Orations of Demosthenes; with revised text, and commentary. Boston:
Ginn & Heath, 1880.

Anacreontics, selected and arranged, with Notes. Boston: Ginn, Heath, & Co., 1882. Pedantic Versicles. Ginn, Heath, & Co., 1883.

Mr. Flagg will give instruction, by correspondence, in the interpretation and criticism of the Classical Greek Authors, and in Greek Prose or Verse Composition.

Text-books will be recommended on inquiry; those necessary for beginners are White's First Lessons in Greek, and Goodwin's Grammar.

The fee for four weeks' tuition in work of pre-collegiate grade is \$6.35; in all more advanced work, \$8.35.

# Albert G. Harkness, A.B.

Professor of Latin in MADISON UNIVERSITY.

#### GRADUATED

At Brown University in 1879 with the degree of Bachelor of Arts.

Has studied three years in Europe.

Mr. Harkness has taught

Two years in Peddie Institute, Hightstown, N. J.

He will give instruction, by correspondence, in Latin of pre-collegiate grade and in the interpretation and criticism of Horace.

Text-books: Harkness' Grammar; Harkness' Caesar, Cicero, and Sallust; Frieze's Virgil. Editions of Horace will be recommended to the student.

The fee for four weeks' tuition in work of pre-collegiate grade is \$6.35; in Horace, \$8.35.

MODERN LANGUAGES



# DAVID J. HILL, LL.D.

Formerly Professor of Rhetoric, now President of THE UNIVERSITY AT LEWISBURG, PA.

#### GRADUATED

At the University at Lewisburg in 1874 with the degree of Bachelor of Arts.

#### Dr. Hill has taught

Ten years in the University at Lewisburg, and in numerous Teachers' Institutes.

#### Publications.

The Science of Rhetoric, Sheldon & Co., N. Y., 1877.
The Elements of Rhetoric and Composition, Sheldon, 1879.
American Authors Series, Biographies of Irving and Bryant.
The Elements of Logic (Revision of Jevons), Sheldon, 1883.
Numerous articles in Magazines, Reviews, and Encyclopedias.

Dr. Hill will give instruction, by correspondence, to a limited number of pupils, in (1) Rhetoric and Composition, and (2) the Science of Rhetoric.

He will also criticise and revise manuscript for publication.

The fee for four weeks' tuition in the first course is \$6.35; in the second \$8.35; and for revision of manuscript a charge will be made according to the character of the aid rendered.

### FRAU FERDINAND PETERS.

Frau Peters has for more than Ten Years been engaged in teaching German both to American and English
Students, and to Americans holding
Positions as Professors.

She will give instruction, by correspondence, in Advanced German Composition.

# WILLIAM HYDE APPLETON, A.M., LL.B.

Professor of the Greek and German Languages in SWARTHMORE COLLEGE.

#### GRADUATED

At Harvard College in 1864 with the degree of Bachelor of Arts.

At the Law School of Harvard University in 1869 with the degree of Bachelor of Laws.

Bowdoin Prizeman in Greek Composition at Harvard College in 1863. Has studied two years in Germany at the Universities of Bonn and Berlin, and one year in Greece.

#### Mr. Appleton has taught

Two years in Harvard College, as tutor in Greek. Ten years in Swarthmore College.

Mr. Appleton will give instruction, by correspondence, in Elementary German and in the interpretation and criticism of Lessing.

The text-book for *Elementary German* is Otto's Grammar, as revised by Cook.

The fee for four weeks' tuition in the elementary course is \$6.35; in Lessing, \$8.35.

# WATERMAN T. HEWETT, A.M., Ph.D.

Professor of the German Language and Literature in the

#### CORNELL UNIVERSITY.

Member of the "Frisian Society of History, Antiquities, and Language," and of the "Society for the Frisian Language and Letters."

#### GRADUATED

At Amherst College in 1869 with the degree of Bachelor of Arts.

At the Cornell University in 1879 with the degree of Doctor of Philosophy.

Alexandria Prizeman in 1865, and Mather Prizeman in Greek Literature in 1867, at
Amherst College.

Has studied two years in Germany and Holland.

#### Mr. Hewett has taught

Thirteen years in the Cornell University.

#### Publications.

The Frisian Language and Literature, a Historical Study, 1879.

Articles upon German literature and university education in the Atlantic Monthly, Harter's Magazine, etc.

Contributor to the Nation and the Goethe-Jahrbuch.

Mr. Hewett will give instruction, by correspondence, in the History of German Literature to Luther, in Middle High German, and in the interpretation and criticism of Goethe.

Text-books: for the *History of the Literature to the Reformation*, Koberstein, Gervinus, and Wackernagel; for *Middle High German*, Paul's and Weinhold's Grammars, Lexer's Dictionary, Bartsch's Deutsche Liederdichter, Zarncke's Niebelungenlied, Martin's Gudrun.

The student will be furnished with references to other manuals and special works.

The fee for four weeks' tuition in any of the above subjects is \$8.35.

# HORATIO S. WHITE, A.B.

# Professor of the German Language and Literature in the CORNELL UNIVERSITY

#### GRADUATED

At Harvard College in 1873 with the degree of Bachelor of Arts.

Has studied three years in Europe.

Mr. White has taught Seven years in the Cornell University.

#### Publications.

Articles in the Nation, Critic, and Literary World.

A paper on French and German in Colleges and Schools, in the Proceedings of the University Convocation (N. V.), 1882.

Contributor to the Goethe-Jahrbuch, and Editor of the Anglo-American bibliography for that annual.

Mr. White will give instruction, by correspondence, in the History of German Literature from Luther, and in the interpretation and criticism of Schiller.

The text-book for the former subject is Scherer's Geschichte der deutschen Litteratur, of which an English translation, in connection with a revised edition of Max Müller's "German Classics from the Fourth to the Nineteenth Centuries," is soon to be published in the Clarendon Press Series. The student will be furnished with references to Goedeke, Koberstein, Gervinus, Biedermann, Hettner, Gottschall, and other literary historians.

The fee for four weeks' tuition in either subject is \$8.35.

# RASMUS B. ANDERSON, A.M.

Professor of Scandinavian Languages and Literature in the UNIVERSITY OF WISCONSIN.

#### Mr. Anderson has taught

Three years in Albion Academy. . Fifteen years in the University of Wisconsin.

#### Publications.

America not discovered by Columbus.

Norse Mythology.

Viking Tales of the North.

The younger Edda.

Horn's History of the Literature of the Scandinavian North from the most ancient times to the present. (This work, of more than 500 octavo pp., will appear in Oct.)

Björnson's stories, 7 vols. Boston; Houghton, Mifflin & Co.

"Julegave," a collection of stories of which the fifth edition has recently been published. Den norske Maalsag, a treatise on the development of the Norse language. Norway Music Album. (Boston; Oliver Ditson & Co.), with Auber Forestier.

Mr. Anderson will give instruction, by correspondence, in the following subjects:

1. Old Norse and Icelandic. Text-book: Icelandic Prose Reader with notes, Grammar, and Glossary, by Gudbrand Vigfusson and F. York Powell. Students will read selections from the eddas and sagas.

Text-book: Peterson's Norwegian-Danish 2. Norwegian-Danish. Students will read selections from modern Grammar and Reader. Norwegian and Danish authors.

3. Swedish. Text-book: May's Practical Grammar of the Swedish Language. Students will read selections from modern Swedish au-

4. Scandinavian Literature. Text-book: Horn's History of Scandinavian Literature, translated by Anderson.

The fee for four weeks' tuition in any of the above subjects is \$8.35.

HEBREW



# REV. A. JAEGER, D.D.

Griswold Professor of Old Testament Instruction in the Theological Seminary of the Dioceses of the Protestant Episcopal Church in Ohio.

#### Dr. Jaeger has taught

Four years in the University of the South.

Three years in the Theological Seminary of the Dioceses in Ohio.

Dr. Jaeger will give instruction, by correspondence, in the Hebrew Language; and in Biblical Introduction, or the study of the higher criticism of the Old Testament, with its bearing upon the History of Israel.

The text-books in *Hebrew* are Davidson's Hebrew Grammar, the Hebrew Bible, and Gesenius' Lexicon.

The text-book in *Biblical Introduction* is Bleck's Introduction to the Old Testament. For this the student should be prepared in the rudiments of the Hebrew Language. But such knowledge, though useful, is not absolutely necessary; much can be learned without it. The student should inform the Instructor whether he has any acquaintance with Hebrew.



PHILOSOPHY



# JAMES McMAHON. B.A.

#### GRADUATED

At Trinity College, Dublin, in 1881 with the degree of Bachelor of Arts.

Gold Medallist and Brooke Priseman in Mathematics. Gold Medallist and Wray Priseman in Ethics and Logic.

#### Mr. McMahon has taught

In the Royal School of Raphoe. In Ennis College. In Trinity College, as private tutor.

Mr. McMahon will give instruction, by correspondence, in Logic.

Text-books of Jevons (Hill's Edition) and J. S. Mill; no previous study of the subject is required.



# HISTORY AND POLITICAL SCIENCE



# WILLIAM C. RUSSEL, A.M., LL.D.

# GRADUATED At Columbia College in 1832.

Mr. Russel has taught History
One year in Antioch College.
Twelve years in the Cornell University.
Two years in Brown University.

Mr. Russel will give instruction, by correspondence, in Roman and Mediaeval History.

For Roman History the text-books are Liddell and Mommsen, supplemented by references to G. C. Lewis, Ihne, Lange, Schwegler, and George Long.

For the History of France and England in the Middle Ages, the Student's History of France and Green's History of England, both supplemented by references to Guizot's History of France and his History of Civilization, Robertson's Introduction, and Hallam's Middle Ages.

# WILLIAM F. ALLEN, A.M.

Professor of Latin and History in the UNIVERSITY OF WISCONSIN.

#### GRADUATED

At Harvard College in 1851 with the degree of Bachelor of Arts.

#### Mr. Allen has taught

One year in Antioch College. Sixteen years in the University of Wisconsin.

#### Publications.

An edition of the Agricola and Germania of Tacitus, besides portions of the "Allen and Greenough" Latin series.

Historical articles in the North American Review, the International Review, and the Christian Examiner.

A series of papers upon the English Peasantry of the Middle Ages, published in the Transactions of the Wisconsin Academy, as follows: (1) The Rural Population of England as classified in Domesday Book. (2) The Rural Classes of England in the Thirteenth Century. (3) Ranks and Classes among the Anglo-Saxons. (4) Peasant Communities in France. (5) The Origin of the Freeholders. (6) The English Cottagers of the Middle Ages.

Reader's Guide to English History, 1882.

History Topics, a guide to instruction (just published).

Contributor to Science, and American Correspondent of the Revue Historique.

Mr. Allen will give instruction, by correspondence, in the History of England.

(1) Formation of the English Constitution. Text-books: Stubbs' Constitutional History, and Select Charters; Freeman's Growth of the English Constitution.

(2) Later History of the English Constitution. Text-books: Hallam's and May's Constitutional Histories; Amos' Fifty Years of the

English Constitution.

(3) English History of the Seventeenth Century. Text-books: Gardiner's Puritan Revolution; Guizot's History of the English Revolution.

The books mentioned above will be supplemented by others from time to time. The student should be provided with some good history of England for reference. Bright's, and Gardiner and Mullinger's English History for Students are recommended.

The fee for four weeks' tuition in any of the above courses is \$8.35.

# EDMUMD J. JAMES, PH.D.

Professor of Finance and Administration in the Wharton School of Finance and Economy, in the

## UNIVERSITY OF PENNSYLVANIA.

### GRADUATED

At the University of Halle in 1877 with the degree of Doctor of Philosophy.

Studied at the Northwestern University and at Harvard University.

#### Mr. James has taught

Two years as Principal of the Public Classical High School in Evanston, Ill.; four years as Principal of the Classical Department of the Illinois State Normal School.

#### Publications.

Studien ueher den amerikanischen Zolltarif: Halle, 1877. Illinois School Yournal; edited, 1881-83. Numerous articles on educational subjects in Education, New England Yournal, and other educational periodicals. Several rticles in Lalor's Encyclopedia of Political Economy, Political Science, and Political His. ry of U. S.: Chicago, 1881-83. Das Studium der Staatswissenschaften in America; Conrad's Jahrbücher für Nationaloekonomie und Statistik: Jena, 1883. The Classical Question in Germany; Popular Science Monthly, January, 1884. Work as associate editor of Das Finanzarchiv: Würzburg, Germany.

Mr. James will give instruction, by correspondence, in the following subjects:

(1) Political Science in the narrower sense of the term—theory of the state and its functions.

(2) Administration and Legislation.

(3) Political Economy.

(4) Science of Finance.

(5) Politics.

For courses (1) and (2) the text-books are Porter's Political Science and Mulford's Nation, supplemented by references to other works, particularly the monographic literature of recent years. In course (3) Mrs. Fawcett's Compend of Political Economy will be the text-book for beginners, followed by Adam Smith, Ricardo, Mill, Carey, Thompson, Walker, and Perry. In course (4) the chapters on taxation in the books just mentioned, with McCulloch, Sinclair, and several recent works on special topics of immediate interest to America, will be made the basis of the work. To students able to read French or German with ease, an additional list of books will be furnished. Course (5) is a course of reading on questions of practical politics connected with the history of our own country, such as Tariff, Free Trade, Recoinage of Silver, Internal Revenue, City Government, etc., dealing with such problems not merely as economical or financial, but as mixed questions—to be determined after considering all their various aspects, and allowing each its due weight.

The fee for four weeks' tuition in any of the above courses is \$8.35.



LAW



# GEORGE CHASE, A.B., LL.B.

Professor of Criminal Law, Torts, and Procedure in the Law School of

# COLUMBIA COLLEGE.

## GRADUATED

At Yale College in 1870 with the degree of Bachelor of Arts. At the Columbia College Law School in 1873 with the degree of Bachelor of Laws.

Valedictorian at Yale in 1870, and received Townsend Prize in Composition. First Prizeman in Municipal Law at Columbia College Law School in 1873.

# Mr. Chase has taught

Ten years in the Columbia College Law School.

#### Publications.

Chase's Blackstone; Johnson's Ready Legal Adviser; many legal articles in *Johnson's Universal Cyclopædia*.

Mr. Chase will give instruction, by correspondence, in Criminal Law.

The text-books are Chase's Blackstone; Bishop's works on Criminal Law and Criminal Procedure.

The fee for four weeks' tuition is \$8.35.



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