

Ferdinand Rudolph Hassler 1816-1843  
 Alexander Dallas Bache ..1843-1867  
 Benjamin Osgood Peirce ..1867-1874  
 Carlile Pollock Patterson ..1874-1881  
 Julius Erasmus Hilgard ..1881-1885  
 Frank Manly Thorne ....1885-1889  
 Thomas Corwin Mendenhall 1889-1894  
 William Ward Duffield ...1894-1897  
 Henry Smith Pritchett ...1897-1900  
 Otto Hilgard Tittmann ...1900-1915  
 Ernest Lester Jones .....1915-

### SCIENTIFIC NOTES AND NEWS

DR. HENRY FAIRFIELD OSBORN, president of the American Museum of Natural History, will give the William Ellery Hale Lectures at the approaching meeting of the National Academy of Sciences. The subject is "The Origin and Evolution of Life on the Earth."

THE following fifteen candidates have been selected by the council of the Royal Society to be recommended for election into the society: Professor E. H. Barton, Mr. W. R. Bousfield, Mr. S. G. Brown, Professor E. G. Coker, Professor G. G. Henderson, Mr. J. E. Littlewood, Professor A. McKenzie, Professor J. A. MacWilliam, Mr. J. H. Maiden, Professor H. H. W. Pearson, Professor J. A. Pollock, Sir L. Rogers, Dr. C. Shearer, Professor D'Arcy W. Thompson, Mr. H. Woods.

It is stated in *Nature* that Mr. Douglas W. Freshfield, president of the Royal Geographical Society, M. Henri Curdier, the French Orientalist, and General Schokalski, the Russian oceanographer, have been elected honorary members of the Italian Royal Geographical Society.

THE Accademia dei Lincei of Rome has awarded the King's prize of £400 for human physiology to Dr. Filippo Bottazzi, professor of physiology in the University of Naples.

DR. GEORGE SARTON, who is now lecturing in the United States on the history of science, the former editor of *Isis*, an international review devoted to the philosophy and history of science, published in Belgium, but discontinued during the war, has been awarded the Prix Binoux by the Paris Academy of Sciences.

PROFESSOR METCHNIKOFF has been seriously ill at the Institut Pasteur. Sir Ray Lankester writes to *Nature* under date of February 26 that his medical attendants believe that the pleurisy will now soon disappear and that the pulmonary congestion has already disappeared.

THE city of Philadelphia, acting on the recommendation of the Franklin Institute, has awarded the John Scott Legacy medal and premium to Hans Hanson, of Hartford, Conn., for his inventions embodied in John Underwood and Company's combined typewriting and calculating machine, and has also awarded the John Scott Legacy medal and premium to Frederick A. Hart, of New York, N. Y., for his inventions embodied in the same machine. In consideration of the part performed by the staff of John Underwood and Company in the development of this machine, The Franklin Institute has awarded its Edward Longstreth medal of merit to John Underwood and Company, of New York, N. Y.

THE prize of \$1,000 offered through the American Social Hygiene Association by the Metropolitan Life Insurance Company for the best pamphlet on social hygiene for girls and boys has been awarded to Dr. and Mrs. Donald B. Armstrong, of Stapleton, N. Y. The paper will soon be issued by the company as one of the health and welfare series published for the benefit of its policyholders.

J. WARREN SMITH, head of the Columbus weather bureau for eighteen years and professor of meteorology at the Ohio State University, has been promoted to be chief of the division of agricultural meteorology with headquarters in Washington.

GEORGE W. SIMONS, JR., assistant to the head of the Sanitary Engineering Department of Harvard Medical School and Massachusetts Institute of Technology, has been appointed chief sanitary engineer to the State Board of Health of Florida, and will take up his new work on July 1.

"LASSEN PEAK, our Most Active Volcano," is the title of a lecture recently given by J. S. Diller, of the United States Geological Survey, at Hunter College and before the Physi-

ographers' Club at Columbia University in New York, and the geological department of Lehigh University, South Bethlehem, Pa.

On the occasion of the initiation ceremonies of the Yale Chapter of the Society of the Sigma Xi, on March 18, Professor J. McKeen Cattell, of Columbia University, gave the address, his subject being "Scientific Research as a Profession."

PROFESSOR S. A. MITCHELL, director of the Leander McCormick Observatory of the University of Virginia, delivered a lecture in Ottawa on March 22 before the Royal Astronomical Society of Canada on the subject "The Exact Distances of the Stars."

PROFESSOR FRANCIS G. BENEDICT, of the Nutrition Laboratory in Boston, lectured, March 14, at Wellesley College on "Living Without Food for Thirty-one Days. A Study in Prolonged Fasting."

MR. FRANK C. BAKER, zoological investigator of the New York State College of Forestry, at Syracuse, addressed, on February 25, the Syracuse Chapter of Sigma Xi on the "Relation of Molluscs to Fish in Oneida Lake."

PROFESSOR M. WEINBERG, of the Pasteur Institute, Paris, delivered a lecture on bacteriological and experimental researches on gas gangrene, with epidiascope demonstration, before the Royal Society of Medicine, London, on March 10.

PROFESSORS MARAGLIANO, of Genoa, and Rummo, of Naples, vice-presidents of the Italian Society of Internal Medicine, have issued an appeal for funds for the erection of a statue of the late Professor Baccelli to be placed in the Policlinico at Rome, in the foundation of which Baccelli took a leading part.

THE Elisha Mitchell Scientific Society held in the chemistry hall of the University of North Carolina on March 14, a memorial meeting in honor of Joseph Austin Holmes, late chief of the Bureau of Mines. The speakers were: Dr. F. P. Venable, Dr. J. H. Pratt and Dr. K. P. Battle.

ERASMUS DARWIN LEAVITT, of Cambridge, Mass., an engineer who made a specialty of pumping and mining machinery, past president of the American Society of Mechanical Engineers, died on March 11, aged eighty years.

ELTON FULMER, Washington state chemist and senior member and dean of the faculty of the Washington State College, Pullman, was killed in a railroad wreck at Cheney, Washington, on February 20, 1916.

MISS ADELE MARION FIELDE, known to scientific men for her work on ants, carried on at the Marine Biological Laboratory during a number of summers, died at Seattle on February 22, aged seventy-seven years. Miss Fielde was a missionary in Siam and China from 1866 to 1889, and is the author of several books concerned with Chinese conditions and Chinese folklore. She had been for many years active in movements for civic and social betterment.

THE death is announced, at Streatham, on February 18, of Professor R. H. Smith, formerly professor of engineering at the Imperial University, Tokio, and afterwards professor of civil, mechanical and electrical engineering at the Mason College, Birmingham.

DR. T. S. HALL, lecturer in biology in the University of Melbourne, and previously director of the School of Mines at Castlemaine, has died at the age of fifty-eight years.

DR. CHARLES GIRARD, professor of clinical surgery at the University of Geneva, Switzerland, has died in his sixty-seventh year.

DR. WALTER LOEB, head of the chemical department of the Rudolf Virchow Hospital in Berlin, died on February 7, aged forty-four years.

DR. WILHELM DEACHAES, curator of geology in the Hanover Museum, has been killed in the war.

On April 1 the Illinois State Civil Service Commission will hold an examination for the position of geologic clerk in the office of the State Geological Survey. This position pays a starting salary of \$75 a month with possi-

bility of later increase to \$150. On May 6 an examination will be held for the position of assistant geologist. This position under the State Geological Survey pays a starting salary of \$75 a month with possibility of increase to \$120. The positions are open to persons over 21 years, including non-residents of Illinois. These examinations are unassembled. Questions relating to training and experience will be mailed to the applicants at their homes. The answers can be mailed to the commission, thus doing away with the necessity of non-residents coming to Illinois. If necessary, those who give satisfactory evidence of ability in this preliminary examination will be called together later for a personal interview at which final ratings will be assigned. For application blanks, address the Illinois State Civil Service Commission at Springfield, Illinois, or Room 904, 130 North Fifth Avenue, Chicago.

THE New York State Civil Service Commission announces an examination on April 8 for zoologist in the State Museum, State Education Department, at a salary of \$1,200. Candidates (men only) must have a general knowledge of biology, special training in zoology and a particular acquaintance with the animal life of New York state. They should also have a particular knowledge of the best methods of museum display, with ability to supervise work in taxidermy. Special credit will be given to those who have had actual experience in museum work and who have superior educational qualifications. There will at the same time be held an examination for examiner in the Educational Department, open to men and women. These examinations are held to provide eligible lists for permanent appointments at salaries of \$900 to \$1,500, and also to provide for a considerable number of temporary examiners required during the summer months at salaries from \$75 to \$125 a month. In all groups except commercial subjects and drawing, candidates must be graduates of a normal school or of an approved college and must have had three years' teaching experience in an approved secondary school in

the subject or subjects in which they desire to be examined. No written examination will be given but candidates will be rated on education, training and experience as determined from the sworn statements in their application blanks and from responses to such inquiries as the commission may deem advisable to make. An oral examination may also be held. In filling out application blanks, candidates are requested in answer to question 20 to make full statement regarding experience. Applications will now be accepted for nine groups, including mathematics, physical science and biological science.

THE agricultural department of the University of Minnesota is taking the lead in a movement to establish a national honorary society for agricultural students similar to Phi Beta Kappa and Sigma Xi. The plans for such a society have been formulated by a committee of faculty members of the college of agriculture, Professor A. V. Storm being chairman of the committee. Correspondence with other agricultural colleges is being conducted and it is hoped that such a society may be organized some time during the present college year. The standards of the new society will be high and membership will be based entirely upon scholarship in agriculture. The present plan is to take in senior students of the college of agriculture, graduate students in agriculture, and men who are doing practical work of unusual value in the field of practical agriculture. The movement started about a year ago with a group of agricultural students.

CORROSION of metallic structures is one of the most serious problems of modern engineering. It still awaits its solution. While it is a chemical phenomenon, electrical engineers are vitally interested in it, on account of the trouble of corrosion of underground structures often attributed to the stray currents from tramways. For the solution of the problem, electrical engineers and electrochemists must combine. For this reason the New York section of the American Electrochemical Society has accepted an invitation of the American Institute of Electrical Engineers to

hold a joint meeting on Friday evening, March 10, at the Engineering Societies Building, 29 West 39th Street, on the subject of corrosion. The principal speakers will be Dr. Burton McCollum, Bureau of Standards, Washington, D. C., for the American Institute of Electrical Engineers and Professor William H. Walker, Massachusetts Institute of Technology, Boston, Mass., for the American Electrochemical Society.

#### UNIVERSITY AND EDUCATIONAL NEWS

THE \$1,800,000 of "University Building Bonds" voted by the people of California through approval of an initiative measure proposed by the alumni of the University of California, for additional building work on the campus at Berkeley, have been segregated by the regents of the university as follows: Benjamin Ide Wheeler Hall, a classroom building with a capacity of 3,500 students, its exterior to be of white granite, \$700,000; completion of the university library, of which the present portion was built at a cost of \$840,000, mostly defrayed by the bequest of Charles F. Doe, \$525,000; second unit of the group of agricultural buildings, \$350,000; first unit of a group of permanent buildings for chemistry, \$160,000; new unit for the heating and power plant, \$70,000; furnishings and equipment for the four structures first mentioned, \$134,000.

THE contract for the new \$60,000 chemistry building for Throop College of Technology was signed March 8, and the construction work was begun at once, the contract calling for the completion of the building in six months, which will be in time for the opening of the fall semester of 1916. This building is of reinforced concrete and hollow tile construction, and will consist of two stories and basement, and contain the research laboratories of Dr. Arthur A. Noyes, who will spend half of each year at Throop College, commencing next winter. The following appointments in the chemistry department for next year have recently been made, William N.

Lacey, Ph.D., University of California, instructor in inorganic and industrial chemistry; Mr. James H. Ellis, of the University of Chicago and Massachusetts Institute of Technology, as research associate in physical chemistry, and Ludwig Rosenstein, Ph.D., of the University of California, who will become professor in inorganic chemistry.

THE Committee on Agriculture of the Massachusetts legislature has the full appropriation of \$382,000 asked for new buildings this year by the Massachusetts Agricultural College.

MESSRS. COOLIDGE AND SHATTUCK, Boston, have been retained as architects for the new buildings of Lakeside Hospital and the medical school of Western Reserve University, and Mr. Abram Garfield, of Cleveland, for the new Babies' Hospital.

#### DISCUSSION AND CORRESPONDENCE MESOZOIC PATHOLOGY AND BACTERIOLOGY

PALEONTOLOGISTS have not yet fully realized the possible value of geological evidences of disease to students of medicine. This may be due to the recent development of pathology and bacteriology or it may be due to the fact that the paleontology of the fossil vertebrates, especially, is still in a formative state. It is a fact, however, that paleontologists occasionally see objects from the early geological strata which show evidences of pathological or bacteriological activity. It would be of great value to those interested in medical subjects to have these objects discussed, since it would be of undoubted value to an understanding of the origin of disease.

Few attempts, so far as I am aware, have been made to bring to the attention of pathologists the earliest evidences of the occurrence of disease, although in the literature of paleontology one often finds figures of fossil bones showing "exostosal growths." Broken ribs, fractured limb bones, and injured vertebræ, a part or all of which show evidences of pathogenic conditions, are not uncommon. I wish in this place to plead for the proper discussion