

and walls of museums and schoolrooms throughout the continent.

He was one of the founders of the Geological Society of America and was connected with a number of other scientific associations, national and local, but he rarely contributed to their discussions. Besides the report on his geologic field work, his contributions to scientific literature included only brief descriptions of meteorites.

Personally Howell was quiet, unassuming and sincere. His recognized integrity was an important factor in his business success. If he had enemies or detractors I have not met them. His modeling was not distinguished by its artistic quality, but was realistic whenever the material from which he worked was full. His clients found him ever clamorous for facts and anxious to revise work at any stage if it could thus be made more truthful, and his clients, who were numerous among the investigators and teachers of geology and geography, were also his friends.

He was born March 12, 1845, in Genesee County, N. Y., and passed his boyhood on a farm. In 1880 he married Annie H. Williams, an artist. His wife died in 1893, but a son and daughter survive him.

G. K. GILBERT

HERMAN KNAPP

THE scant space given in the press to the death of Dr. Herman Knapp is but another proof that we have not come to place that value upon great scientists which is characteristic of older countries. Had he lived in Berlin or Paris the passing of Dr. Knapp would have been one of the great topics of the day, for his was a life of singular usefulness to the community, as well as to the science of ophthalmology, and there were few American medical men who rejoiced in wider renown on the other side of the water than did he. He studied at no less than seven European universities. He established a dispensary and hospital for eye diseases which is now a part of the University of Heidelberg, at which he taught for four years. Settling in this city in 1868, he became at once the foremost practi-

tioner in ophthalmic and aural diseases and the founder of the Ophthalmic and Aural Institute, besides being a professor in the College of Physicians and Surgeons. But this is the briefest outline of an enormously busy and useful life. Never was there a doctor in New York who gave more generously of his services to the poor and the needy; to them he would go even late at night after an exhausting day's labor, if no other time was available. More than that, the whole science of medicine is in his debt for the Archives of Ophthalmology and Otology which he founded, as well as for numerous treatises and text-books of permanent value and for his lasting contributions to the treatment of eye diseases.—N. Y. *Evening Post*.

SCIENTIFIC NOTES AND NEWS

DR. FREDERIC A. LUCAS, curator in chief of the Museum of the Brooklyn Institute, and formerly curator of the U. S. National Museum, has been elected director of the American Museum of Natural History.

DR. LEWIS BOSS, director of the Dudley Observatory, Albany, has been elected a corresponding member of the St. Petersburg Academy of Sciences.

PROFESSOR EDWARD L. MARK, director of the Harvard Zoological Laboratory, has been elected a foreign member of the Bohemian Academy of Sciences.

DR. E. B. WILSON has been designated Da Costa professor of zoology in Columbia University, succeeding in this chair Professor Henry F. Osborn, who becomes research professor of zoology.

THE Edward Kempton Adams research fellowship has been awarded by Columbia University to Dr. R. W. Wood, professor of experimental physics at the Johns Hopkins University.

A PORTRAIT of Professor John Cleland, who from 1877 to 1909 occupied the chair of anatomy at Glasgow, was presented to the university on April 26 and a copy to Mrs. Cleland. Before the presentations the senate met and conferred on Professor Cleland the honorary degree of LL.D.

DR. ALFRED TOZZER, of Harvard University, has been made a corresponding member of the Société des Américanistes de Paris.

PRESIDENT TAFT has designated Secretary of Commerce and Labor Nagel and Mr. Chandler P. Anderson, counsellor of the State Department, to confer with representatives of Great Britain, Japan and Russia and to negotiate a treaty for the protection of seals and other mammals in the North Pacific Ocean.

DR. ISSA TANIMURA, an honorary fellow in the College of Agriculture of Cornell University, has been appointed by the government of Japan a special commissioner of agriculture to investigate the live-stock industry in this country.

MR. C. H. T. TOWNSEND has accepted an extension of contract from the Peruvian government, as entomologist of state, to December 31, 1912, and expects to conduct extended parasite work against cotton insects, especially the white scale and the square weevil. A laboratory will be established at Piura, in northern Peru, for the accommodation of the work, and a corps of assistants will be provided.

DR. L. J. COLE, professor of experimental breeding at the University of Wisconsin, will leave on May 6 for a summer's work in western Europe. His trip will include an inspection tour of all the experiment stations and agricultural colleges.

PROFESSOR C. C. THOMAS, of the engineering school of the University of Wisconsin, has been appointed the university's delegate to the one hundredth anniversary of the foundation of the University of Breslau, which will be held from August 1 to 3, 1911.

LEAVE of absence has been granted by the board of trustees of Worcester Polytechnic Institute to Professor Harold B. Smith for a period of two years. About one year will be spent in travel. The second year will be spent in special resident study at Berlin and Zurich, and in the investigation of as many European educational institutions as possible. This leave of absence follows fifteen consecutive years of active work on the part of Professor

Smith as head of the electrical engineering department of the institute.

DURING the Easter recess Professors Gilbert van Ingen and William J. Sinclair led an expedition of Princeton students to Yorktown, Va., for field work on the Miocene formation at that place.

PROFESSOR SVANTE ARRHENIUS, delivered three lectures at Harvard University on April 25 and 28 and May 1. The titles were "The Mutual Relations of the Exact Sciences"; "The Theory of Electrolytic Dissociation," and "Adsorption." A dinner in his honor was given by members of the scientific departments at Harvard on May 3.

PROFESSOR E. F. MCCAMPBELL, of the department of bacteriology of the Ohio State University, delivered the annual chapter lecture of the Sigma Xi society of that institution on Wednesday evening, April 26, on the subject, "The Poisonous Secretions of Animals."

DR. GEORGE T. MOORE, of Washington University, delivered the Sigma Xi address at the University of Missouri on "Modern Botany, its Development and Application."

LADY KELVIN has made a gift of £500 to the University of Glasgow for a prize in memory of the late Lord Kelvin. The prize, which will be accompanied by a gold medal, will be awarded once in three years to a doctor of science whose dissertation contains evidence of distinguished original experimental work.

THE freedom of the City of London has been conferred 178 times since the year 1757, the recipients including four scientific men: Edward Jenner, Sir George Arey, Sir Henry Bessemer and Lord Lister.

DR. HERMAN KNAPP, professor emeritus of ophthalmology in Columbia University, eminent for his contributions to this subject, died on April 30, in his eightieth year.

DR. PEHR OLSSON-SEFFER, born in Finland in 1873, formerly instructor in botany at Stanford University, and recently director of the Tezonapa Botanical Station and botanist of the Mexican government, has been murdered by brigands in the Mexican insurrection.

DR. CAMERON PIGGOTTY, professor of chemistry in the University of South, died on April 30, aged fifty-five years.

MR. HENRY SCHERREN, an English writer on zoological subjects, died on April 25.

THE death is announced of M. Henri Berge, professor of chemistry at the University of Brussels.

THE U. S. Civil Service Commission announces an examination on June 7, to fill one or more vacancies in the position of botanical translator, at \$1,400 or \$1,500 per annum, in the Bureau of Plant Industry, Department of Agriculture.

THE forty-fourth annual meeting of the Canadian Medical Association will be held at Montreal in the first week of June, immediately after the official opening of the new medical buildings of McGill University.

Nature states that an important discovery in regard to the existence of man in early Pleistocene or Pliocene strata has been made by the Marquis of Cerralbo in Spain. In the alluvial deposits of the River Jalon, which is an affluent of the Guadalquivir, he has discovered very abundant remains of undoubted *Elephas meridionalis* in contact with well-characterized implements of human workmanship of the proto-Chellean type. Photographs of the specimens and of the cuttings in which they occur have been received from the marquis in Paris, and Professor Marcelin Boule left Paris in Easter week in order to examine the site and the specimens. It is possible that *E. meridionalis* may have survived in the south of Europe from Pliocene into early Pleistocene times, but the association of implements of human workmanship with this early species of elephant is altogether new.

OFFICERS of a number of the leading colleges and universities charged with the business administration, met at Yale University on April 27. The following subjects were proposed for discussion:

Methods of increasing graduate financial interest in university endowment.

The problem of the investment of trust funds—

whether to apply each investment to a specific fund, or to invest the funds collectively.

Dormitories—their construction, management and the income to be expected from them.

What constitutes adequate fire, liability and casualty insurance?

Budget and appropriation systems.

The requirement of bonds from students for the payment of college bills.

Infirmary administration and sanitary inspection.

Pensions for employees and the general question of "welfare work" for employees.

The problem of the dining hall.

The establishment of central stations for heat, light and power.

Consideration of the Carnegie report on "Academic and Industrial Efficiency."

Cooperative purchasing by universities.

Should students who can afford it pay the full cost of tuition voluntarily?—about 40 per cent. of the cost of education now being paid by the student.

"Functional" administration versus "departmental" administration.

"Centralized administrative responsibility" versus "committee government."

THE eighth annual session of the Puget Sound Marine Station at Friday Harbor, in the state of Washington, will begin on Monday, June 26, and continue for six weeks, closing on August 5. The laboratory will be under the general charge of Professor Trevor Kincaid, of the University of Washington, assisted by a council representing the several institutions participating in the organization. The instructors with the courses they offer will be as follows: *Ecology*, Trevor Kincaid, University of Washington; *Comparative Embryology*, W. J. Baumgartner, University of Kansas; *Plankton*, John F. Bovard, University of Oregon; *General Zoology*, H. B. Duncanson, State Normal School, Peru, Nebraska; *Algæ*, Geo. B. Rigg, University of Washington; *Phanerogamic Botany*, A. R. Sweetser, University of Oregon. The work of the station entered upon a new phase during the session of 1910, when a substantially constructed three story laboratory was put into commission, provided with running salt and fresh water, electric light, aquarium tanks, etc. An addi-

tional building is now under construction. The equipment has been greatly improved through provision for more thorough deep-water dredging operations. Exceptionally fine opportunities are presented for the collection of class material as well as for systematic and ecological study. Information in regard to the station will be supplied by the director, Trevor Kincaid, University of Washington, Seattle, Wash.

THE following resolution with reference to the chestnut blight disease was presented by Professor John W. Harshberger at the general meeting of the American Philosophical Society and unanimously adopted on April 22, 1911:

WHEREAS, there has appeared in the eastern United States a destructive fungous disease of the chestnut tree, known as the chestnut blight, which as a disease in epidemic form threatens to destroy the native chestnut throughout North America, be it

Resolved, that the American Philosophical Society in general meeting assembled heartily supports appropriate legislation in Pennsylvania, in other states, or by the national government looking to the eradication of the disease by the establishment of a quarantine, or by other more drastic measures of destroying the diseased trees along the outposts of the infected areas, and be it

Resolved, that the members of the national Congress and the members of the several state legislatures are requested to adopt such legislation, as above mentioned, and appropriate sufficiently large sums of money with the view of stamping out the disease before it reaches the main body of chestnut timber in the southern and southwestern deciduous forests of our country, and it is

Resolved, that the members of the American Philosophical Society will support the movement begun in Pennsylvania looking to the eradication of the disease from our too rapidly disappearing forest areas.

THE London correspondent of the *Journal* of the American Medical Association writes that the National League for Physical Education and Improvement has proposed that the London memorial to the late King Edward, whose great interest in sanitary problems is well known, should take the form of a public

health museum. In a recent conference of health-promoting institutions, a discussion on the need of coordination disclosed the existence of over eighty such national agencies in London and of a large number of local agencies in London and throughout the country. It was shown that these suffered much both in finance and work from overlapping, from separation of offices and staff and from lack of coordination. The striking success of the tuberculosis exhibition opened in Dublin and then transferred to the Irish Village in the exhibition at London and to other places throughout the country, demonstrated the great interest taken by the public in sanitary questions. It is proposed to erect a popular museum which should accommodate a permanent collection and also furnish duplicate material for the equipment of traveling vans. It should be a model in constant and close relation with provincial museums to which it would probably give birth. It might also become a loan center for the distribution of replicas of its models and diagrams for circulation among schools and institutions. The building should also form a nucleus for the coordination of the various health-promoting institutions, both metropolitan and national. For this purpose, it should include the following: Two or three meeting halls of different sizes, ten or twelve committee rooms, central offices, a library and reading rooms, lecture rooms, workshop and draftsman's room. The cost of maintenance would be met, to some extent, by the rental of suites of offices, halls, committee rooms, especially by health-promoting conferences and institutions, and to some extent by small fees for courses of instruction. In the main, however, instruction must be given at a low cost, fees being charged only when they will guarantee greater interest in those who pay, and being reduced to such a level as will admit of the greatest possible use of the facilities provided. This would be sufficient grounds for appealing for subscriptions to trades unions, friendly societies, insurance companies and the general public. An appeal will be made for a memorial sum of \$500,000 and a subscription of \$25,000 a

year as a minimum. The early cooperation of organizations of the working classes and of those working for the prevention of tuberculosis and alcoholism will be sought.

THE Weather Bureau has published for many years the *Monthly Weather Review*, treating of the general weather conditions throughout the United States as a whole, with occasional summaries of climatic data from other and frequently little known regions of the earth. Also there have appeared in its pages many scientific and popular contributions from the best students of meteorology and kindred subjects, thus making it one of the leading meteorological and climatological journals of the world. A considerable number of the several monthly and annual issues of this publication have accumulated in the files of the Weather Bureau and it is thought they would be a valuable addition to any library. If any library desires copies of these publications, either for the completion of broken files or as new matter of public interest, copies of such issues as are available will be furnished free of charge upon request.

UNIVERSITY AND EDUCATIONAL NEWS

COLUMBIA UNIVERSITY has received an anonymous gift of \$10,000 annually for four years for surgical research, and a gift of \$15,000 for five years for the establishment of a bureau to study legislative drafting.

FURMAN UNIVERSITY, the Baptist College of South Carolina, has now in course of construction a \$50,000 science building which will accommodate the departments of chemistry, biology and physics with lecture rooms and laboratories. Half the cost of this building was supplied by local contributors and the other half was the gift of Mr. Rockefeller. It is expected that the building will be completed and ready for occupancy at the beginning of the next session, in September.

MISS A. H. CRUICKSHANK, daughter of a former professor of mathematics in Aberdeen University, who during her lifetime made generous gifts to the university, has bequeathed £22,000 for the endowment of a chair of as-

tronomy, the establishment of a science library and the provision of law prizes in the university, and the residue of her estate for kindred objects.

THE Drapers' Company, London, has granted £6,000 to the Battersea Polytechnic for the erection and equipment of a department of hygiene and physiology.

DR. HENRY PIKE, of the University of Chicago, has been appointed assistant professor of physiology and Dr. Warfield T. Longcope, of the University of Pennsylvania, assistant professor of medicine in Columbia University.

At Cornell University Mr. F. K. Richtmyer has been promoted to be assistant professor of physics; Mr. C. W. Bennett, to be instructor in chemistry, and C. K. Carpenter to be instructor in experimental engineering.

THE following promotions have been made in the department of botany of the University of Chicago: Charles J. Chamberlain, advanced from assistant professor to associate professor; Henry C. Cowles, advanced from assistant professor to associate professor; William J. G. Land, advanced from instructor to assistant professor; William Crocker, advanced from instructor to assistant professor.

DISCUSSION AND CORRESPONDENCE

PHARMACOLOGICAL ACTION OF THE NON-ALCOHOLIC CONSTITUENTS OF ALCOHOLIC BEVERAGES

TO THE EDITOR OF SCIENCE: In a recent number of SCIENCE¹ D. D. Whitney, in an article entitled "The Poisonous Effects of Alcoholic Beverages not Proportional to their Alcoholic Contents," cites the following sentences from my report on the pharmacological action of ethyl alcohol:²

The more concentrated alcoholic liquors or spirits are, from a practical point of view, the

¹ April 14, 1911, p. 587.

² "A Critical Review of the Pharmacological Action of Ethyl Alcohol, with a Statement of the Relative Toxicity of the Constituents of Alcoholic Beverages," by John J. Abel, pp. 1-169 in Vol. II., "Physiological Aspects of the Liquor Problem," Boston and New York, Houghton, Mifflin & Co., 1903.