

brink of striking developments in our knowledge of the structure of the elusive atom. Whatever may be the outcome of researches now prosecuted with so much zeal and success, I feel that Addison was speaking with the voice of prophetic truth when, more than a hundred years ago, he said:

Every atom is a standing miracle and endowed with such qualities as could not be impressed upon it by a Power and a Wisdom less than infinite.

SCIENTIFIC NOTES AND NEWS

THE colleagues of Professor Theobald Smith on account of the impending severance of his connection with Harvard University after a service of twenty years to become a member of the Rockefeller Institute of Medical Research, are arranging to present a bas-relief of Professor Smith to the medical school and reductions of this will be made and presented to each donor of \$10 or more to the fund. A complimentary dinner will be given to Professor Smith on April 17.

A "GORGAS Medal" to be given yearly in honor of Surgeon-General Gorgas has been established by the medical reserve corps, U. S. army, New York state division. This medal is open to competition to members of the medical corps of the United States army, to medical reserve corps of the army and to members of the medical corps of the organized militia. Officers may submit papers on any subject of a medico-military nature.

THE Cornell Society of Civil Engineers held on January 22 in New York City its tenth annual dinner and reunion. The chief guest was Professor Charles D. Marx, of Leland Stanford Junior University, who has recently been elected president of the American Society of Civil Engineers.

DR. J. SCOTT KELTIE, secretary of the Royal Geographical Society, has been awarded the Cullum gold medal of the American Geographical Society.

THE Academy of Natural Sciences of Philadelphia has elected as correspondents Frank Dawson Adams, of Montreal, and Alfred Werner, of Zurich.

DR. H. E. ROBERTSON, of the University of Minnesota, is working in Professor Aschoff's laboratory and clinic at Freiburg, Baden. He reports himself as the only foreign student at present in attendance. The staff of over thirty members has been reduced to five and the number of students from 130 to 40.

THREE physicians of forty who took the recent civil service examination for the position of director of public health education, in the city of New York, have been placed on the eligible list, and President Henry Moskowitz of the municipal commission is reported to have said that an appointment will be made within a few days by Health Commissioner Goldwater. The eligible candidates are: Dr. Ira S. Wile, Dr. Winthrop Talbot and Dr. Charles F. Bolduan.

THE Fenger Fellowship of \$600 for 1915 has been assigned to Dr. George L. Mathers, of the resident staff of the Cook County Hospital, Chicago, who will carry on work on certain bacteriological problems in pneumonia.

MR. GEORGE P. VANIER, of Steelton, Pa., has been awarded a certificate of merit by The Franklin Institute, Philadelphia, Pa., for his potash bulb. This bulb has been particularly designed for use in the determination, in industrial laboratories, of the total carbon in iron or steel. Mr. Vanier is chief chemist of the Pennsylvania Steel Co., Steelton, Pa. He has also designed zinc tubes and sulphuric acid bulbs for use in connection with the Vanier combustion train for the determination of carbon in steel by the direct combustion method with the electric furnace.

PROFESSOR ARTHUR KEITH, conservator of the museum at the Royal College of Surgeons of England, will deliver, during the latter part of March, a course of five lectures on the bearing of recent discoveries on our conception of the evolution and antiquity of man.

COLONEL GEORGE W. GOETHALS, who has been appointed Stafford Little lecturer on public affairs at Princeton University for this year, delivered an illustrated lecture on the Panama Canal at Princeton on Wednesday evening, January 27, in Alexander Hall. Owing to the

difficulty in arranging satisfactory dates, there will be only one Stafford Little lecture this year, instead of the usual two. The lecture will be published by the Princeton University Press in the Stafford Little lecture series, the former volumes in the series being by Grover Cleveland, Joseph H. Choate, Elihu Root and J. G. Schurman.

AT the Founder's Day celebration of Clark University on February 1 the speaker will be Dr. R. S. Lillie, professor of biology in the university. His subject is "The Relation of Universities to Investigation."

ON the return from his recent journey west, Dr. Ales Hrdlička, of the U. S. National Museum, lectured, under the auspices of the Archeological Institute, on "The Origin and Antiquity of the American Indian," and on "Evolution of Man in the Light of Recent Discoveries," at San Diego, Los Angeles, Stanford, Berkeley, San Francisco, Denver, Colorado Springs and Pueblo.

PROFESSOR CLARA A. BLISS, of the department of chemistry of Wells College, is on leave of absence for a second year and is studying at Columbia University. Dr. Minnie A. Graham continues as acting professor during Miss Bliss's absence.

MR. N. C. NELSON, of the American Museum of Natural History, has returned from several months' archeological field work in New Mexico, where his work was a continuation of that of previous years on the ancient villages of the Tanos, south of Santa Fé.

ACCORDING to daily papers Mr. Burt M. McConnell, who was secretary to Stefansson, the explorer, and meteorologist of the Canadian Arctic expedition is seeking to induce either the United States government or private citizens to send two hydro-aeroplanes into the far north to search for the explorer, who has not been heard from in over a year. Mr. McConnell has returned from Ottawa, where he tried to interest the Naval Service Department in the project. He was told that nothing could be done at this time. The belief in Canada is that Stefansson and his two companions, Anderson and Storkerson, are still alive and doing the work planned.

THE city of Philadelphia, acting on the recommendation of The Franklin Institute, Philadelphia, Pa., has awarded the John Scott legacy medal and premium to Dr. Charles Edward Guillaume, of Sèvres, France, for his alloy invar. This alloy contains approximately 63.8 per cent. iron and 36.2 per cent. nickel. It is characterized by possessing an extremely small coefficient of linear expansion, about 0.0000004 per degree Centigrade. Within the limits of atmospheric temperature change, its expansion is very exactly proportional to the temperature. It has a modulus of elasticity of about two thirds that of steel, and its hardness is greater than that of hard brass. Invar has found a wide application in metrology and horology. In the former, it is particularly useful for secondary standards of length, and in the latter it is employed for pendulum rods, compensating devices for torsion pendulums and balance wheels correcting the secondary error of temperature in chronometers. Dr. Guillaume has done a large amount of research work in connection with iron-nickel alloys, in the course of which he also discovered platinite.

PROFESSOR LEWIS LINDSAY DYCHE, professor of systematic zoology and taxidermy and curator of birds and mammals in the University of Kansas, died on January 20, at the age of fifty-eight years.

DR. DUDLEY PETER ALLEN, professor of principles of surgery in the medical department of Western Reserve University, Cleveland, for many years, and later emeritus professor, died on January 6, at the age of sixty-two years.

MR. THOMAS BRYANT, a distinguished British surgeon, has died at the age of eighty-six years. He retired from the surgical staff of Guy's Hospital in 1888, delivered the Hunterian oration in 1893 and served as president of the Royal College of Surgeons of England from 1896 to 1899.

SURGEON-GENERAL WILLIAM HENRY MCNAMARA, of the British army, died on January 9, at the age of seventy years.

THE death is announced, at seventy-one years of age, of Lieut.-Col. D. D. Cunningham,

F.R.S., formerly professor of physiology in the Medical College, Calcutta.

At the meeting of the Entomological Society of France on November 11, the president announced the death at the front of Léon Garreta and Jean Chatanay, two lieutenants of the reserve and members of the society. The president also announced that it has been decided to place a tablet in the library upon which shall be engraved the names of members of the society who have fallen and may fall during the war. He also announced that Captain A. Magdelaine and Messrs. J. de Muizon and J. Surcouf, also members, had been wounded but were convalescent, while J. Hervé-Bazin was in the hospital with typhoid fever. All of these men are known to American entomologists through their writings.

The following resolution was unanimously adopted at the annual meeting of the Federation of American Societies for Experimental Biology held in St. Louis, on December 28:

WHEREAS, Various of the European nations with which many of our members are related by birth, descent or intellectual friendship are now at war,

Resolved, That we extend to the scientific men within these nations the hope of an early and enduring peace, which will leave the nations with no permanent cause of rancor towards each other, and which will insure to each the glories of scientific and humanitarian achievement in accordance with its own conception of these ideals.

THE Society of American Bacteriologists held its annual meeting in Philadelphia at the Laboratory of Hygiene, University of Pennsylvania, December 29, 30 and 31, 1914. The following officers were elected:

President: D. H. Bergey.

Vice-president: John Weinzirl.

Secretary-Treasurer: A. Parker Hitchens.

Council: K. F. Kellerman, W. A. Stocking, Jr., R. E. Buchanan and H. J. Conn.

Delegate to the American Association for the Advancement of Science: M. J. Rosenau.

The next regular meeting of the society will be held in Urbana, Illinois. The chairman of the local committee is Professor H. A. Harding. A special meeting of the society will be held in San Francisco during the summer.

THE American Microscopical Society at present holds only business meetings. At the recent meeting at Philadelphia the following officers were elected:

President: Professor C. A. Kofoid, University of California, Berkeley, California.

First Vice-president: Professor L. D. Swingle, University of Utah, Salt Lake City, Utah.

Second Vice-president: Dr. N. A. Cobb, U. S. Department of Agriculture, Washington, D. C.

Executive Committee: Professor J. P. Campbell, University of Georgia; Professor L. E. Griffin, University of Pittsburgh; Professor A. L. Weiman, University of Cincinnati.

Representative on the council of the American Association: Drs. H. L. Shantz and R. H. Wolcott.

The report of the custodian showed that the Spencer-Tolles research fund closely approaches \$5,000. The income of this fund is now available for aid in research in any microscopic field. Applications should be made to Dr. H. B. Ward, University of Illinois, Urbana, Ill. The membership of the society was shown to have increased steadily for the last four years and now totals 399. The income for the year was \$1,380. The secretary of the society is Professor T. W. Galloway, Millikin University, Decatur, Ill.

THE American Folk-Lore Society met in Philadelphia, on December 30, 1914, in affiliation with the American Anthropological Association and Section H of the American Association for the Advancement of Science. Dr. Pliny Earl Goddard, president of the society, was in the chair. The papers read were as follows:

"The Relation of Folk Lore to Anthropology (presidential address)," by Pliny Earl Goddard.

"The Knowledge of Primitive Man," by A. C. Goldenweiser.

"European Tales Among the North American Indians," by Stith Thompson.

"The Magic Boat," by Phillips Barry.

Officers elected for 1915 are as follows:

President: Dr. Pliny Earl Goddard, American Museum of Natural History, New York.

First Vice-president: Professor G. L. Kittredge, Harvard University.

Second Vice-president: Professor J. Walter Fewkes, Smithsonian Institution.

Editors: Professor Franz Boas, Columbia University; Professor Aurelio M. Espinosa, Stanford University.

Secretary: Dr. Charles Peabody, Cambridge, Mass.

Treasurer: Mr. E. W. Remick, Boston, Mass.

NEARLY all the papers and practically all the discussion at the recent Chicago meeting of the American Philosophical Association centered on practical ethical questions forced to the front by present international, political, social and economic conditions. The American Philosophical Association and the Western joined in their meetings, and these two in turn had a joint session with the Political Science Association, the Association of American Law Schools, and the American Historical Association, on the subject of Democracy and Responsibility. The officers elected by the American Philosophical Association for the ensuing year are: *President*, Professor A. C. Armstrong, of Wesleyan University; *Vice-president*, Professor W. E. Hocking, of Harvard; *Secretary-Treasurer*, Professor E. G. Spaulding, of Princeton.

THERE has recently been received a notice from Professor Fehr, of Geneva, secretary of the International Commission on the Teaching of Mathematics, giving the decision of the central committee to abandon the meeting planned for August, 1915, and also to postpone the preparation of such committee reports as relate to the work of European countries.

THE new radium laboratories of Manchester Infirmary, which contain radium of the value of £20,000, raised by public subscription a few months ago, have been formally opened by the mayor of the city. A staff of experts will specialize on efforts to apply the radium for the arrest and elimination of cancer. The equipment of the laboratories is second to none in the kingdom, and in the 16 rooms allotted to this special work there is ample provision for administering the treatment to patients.

THE board of managers of the New York

Zoological Society held their annual meeting on January 19. It was reported that the Aquarium drew 2,029,707 visitors last year and the park zoological gardens 2,020,433, a substantial increase over 1913. The annual maintenance cost to the city last year was 5.8 cents a visitor, the appropriations being the same as planned for next year, \$247,000. On January 1 there were at the park 4,353 animals, representing 1,179 species, and the aquarium 5,169 specimens of 199 species. Animals acquired during the year cost \$25,000. The most notable was a female gorilla brought from Africa by an expedition directed by Mr. R. L. Garner.

THE department of public health of the American Museum of Natural History is at present engaged in the preparation of a special exhibit of military hygiene and sanitation, dealing with the health of armies, the hygiene of the individual soldier and the general problems of camp sanitation. A number of new exhibits illustrative of insect-borne diseases were added to the department's display during 1914, the most important single exhibit being a model of the flea (carrier of bubonic plague) 1,728,000 times natural size, prepared by Mr. Ignaz Matusch. The history of the bubonic plague in the past is shown by reproductions of a number of early paintings and by a series of maps illustrating the geographic spread of disease during its historic epidemics. A series of photographs of four American army surgeons who discovered the mosquito transmission of yellow fever, has been hung near the entrance of the hall.

UNIVERSITY AND EDUCATIONAL NEWS

THE alumni of Stevens Institute of Technology were told at their annual dinner in the Hotel Astor on January 23 that their ten-day campaign to raise \$1,360,000 had yielded \$1,164,269, and that an extension of time had been granted in which the remainder might be collected. Dr. Alexander C. Humphreys, president of the institute, made the confident prediction that the whole amount would be raised by the end of this week.