XIII. That an American plant-protection conference be convened, the delegates thereof to be one or more technical experts from each of the several American countries, and that, as soon as practicable, a meeting of this conference be held to discuss suitable legislation, the means of establishing competent scientific bureaus, and to recommend such cooperative research work and control of plant introduction as may be advisable, and to use all reasonable efforts to secure appropriate action by the several countries.

XIV. Recommends the distribution of information regarding the agricultural production of the different countries and of the publications relating thereto.

XXVIII. (1) That a compilation according to a definite plan be made of the mining laws of the American countries, not only in their original languages, but also in English or Spanish or Portuguese translations, as the case may be, with a view to the reciprocal improvement of the laws of each individual country. (2) That the several American governments appoint a committee to consider the uniformity of mining statistics, and to make recommendations to their respective governments for the systematizing, simplifying and standardizing of such statistics.

XXIX. That all American countries inaugurate a well-considered plan of malaria eradication and control based upon the recognition of the principles that the disease is preventable to a much larger degree than has thus far been achieved, and that the education of the public in the elementary facts of malaria is of the first order of importance to the countries concerned.

XXX. That the American republics in which yellow fever prevails, or is suspected of prevailing, are urged to enact such laws for the eradication of yellow fever as will best accomplish that result. That inasmuch as yellow fever exists in some of the European colonies in America, it is desirable to invite them to adopt measures for its elimination.

XXXIV. That the American governments, deriving important revenues from the consumption of alcohol, should organize their systems of taxation so that the economic interests be subordinated to the higher interests of a social and moral order, which tend to the suppression of alcoholism.

XXXV. That it is very advisable that the different monetary systems of the American republics be studied from a scientific point of view and in connection with the experience of the various American countries, in such matters.

XXXVI. That the American republics make

uniform, as far as possible, the basis and adopt a common time for the taking of census, and adopt uniform principles in commercial and demographic statistics.

In conclusion, the congress specially recommends, for execution by the present Pan-American Union or by means of any other institution in actual existence or to be established, the following propositions:

The establishment of an intellectual Pan-American union to unite the various associations of different character—technical, medical, legal, etc.—divided into sections according to the groups that may be deemed convenient, such as a university section, a library section, etc.

The details thereof are contained in the records of the congress in the form of four propositions dealing with the proposed union. The organization that may take charge of its establishment will lay broad and deep the true foundations of intellectual Pan-Americanism.

SCIENTIFIC NOTES AND NEWS

The permanent secretary of the American Association for the Advancement of Science requests us to state that in the report of the Columbus meeting reference should have been made in the account of the opening exercises to the admirable response to the address of welcome by the president of the association, Dr. W. W. Campbell, director of the Lick Observatory.

THE Bruce gold medal of the Astronomical Society of the Pacific has been awarded to Dr. George Ellery Hale, director of the Mount Wilson Solar Observatory.

At the recent meeting of the American Society for Experimental Pathology in Boston, Dr. Simon Flexner was elected president, Dr. Gideon Wells vice-president, and Dr. Peyton Rous secretary for the year 1916. The Society for Experimental Pathology will hold its next meeting in New York next December, together with the other constituent organizations of the Federation of American Societies for Experimental Biology. Dr. Flexner is the chairman of the executive committee of this organization for 1916 and Dr. Rous is general secretary.

Officers of the Philosophical Society of Washington elected for 1916 are: President,

L. J. Briggs; Vice-presidents, E. Buckingham, G. K. Burgess, W. J. Humphreys, Wm. Bowie; Secretaries, J. A. Fleming, P. G. Agnew; Treasurer, R. B. Sosman; General Committee: The foregoing officers and the following members-at-large: H. L. Curtis, N. E. Dorsey, R. L. Faris, E. G. Fischer, D. L. Hazard, R. A. Harris, W. F. G. Swan, W. P. White, F. E. Wright and Past-presidents G. W. Littlehales and C. K. Weed.

RECENT grants from the Bache Fund of the National Academy of Sciences have been made by the Committee as follows:

No. 187 to H. H. Lane, State University of Oklahoma, \$500 for the purchase of apparatus to be used in a comparative study of the embryos and young of various mammals in order to determine, by physiological experimentation and morphological observations, the correlation between structure and function in the development of the special senses.

No. 188 to H. W. Norris, Grinnell College, \$100 for assistance in the analysis of the cranial nerves of Cocilians (*Herpele* and *Dermophis*).

No. 189 to E. J. Werber, Woods Hole, \$230 for assistance in experimental studies aiming at the control of defective and monstrous development: (1) The effect of toxic products of metabolism on the developing teleost egg; (2) the effect of experimentally produced diseases of parental metabolism on the offspring in mammals.

No. 190 to H. S. Jennings, Johns Hopkins University, \$200 for assistance in the study of evolution in a unicellular animal multiplying by fission: heredity, variation, racial differentiation in *Diffugia*.

No. 191 to P. W. Bridgman, Harvard University, \$500 for mechanical assistance in an investigation of various effects of high hydrostatic pressure, in particular the effect of pressure on electrical resistance of metals (continuation).

No. 192 to J. P. Iddings, Washington, D. C., \$1,000 for apparatus and assistance in the microscopical and chemical investigation of igneous rocks, for the purpose of extending knowledge regarding petrographical provinces and their bearing on the problem of isostasy.

No. 193 to C. A. Kofoid, University of California, \$500 for assistance in securing animals in the Indian jungle and in their preparation for study in research on the intestinal protozoa.

No. 194 to R. A. Daly, Harvard University,

\$1,000 for the purchase of a thermograph of new design for determining temperature in the deep sea.

No. 195 to R. W. Hegner, University of Michigan, \$160 for assistance in the study of the history of the germ cells, especially in hermaphrodite animals in order to determine the visible changes that take place in their differentiation and the causes of these changes (continuation).

The Committee on the Bache Fund at present is constituted as follows: Ross G. Harrison, Yale University; Arthur G. Webster, Clark University, and Edwin B. Frost, chairman, University of Chicago (Williams Bay, Wisconsin).

We learn from *Nature* that the committee appointed by the Paris Academy of Sciences to examine the requests for grants from the Bonaparte Fund make the following proposals, which have been confirmed by the academy:

3,000 francs to Auguste Lameere, professor at the University of Brussels, to enable him to continue his researches at the Roscoff Zoological Station.

4,000 francs to Charles Le Morvan, assistant astronomer at the Paris Observatory, for the publication of a systematic and photographic map of the moon.

2,000 francs to Paul Vayssière, for the continuation of his researches on the various species of cochineal insects.

3,000 francs to François de Zeltner, to contribute to the cost of a proposed expedition to the Sudanese Sahara, more particularly in the Aïr massif.

2,500 francs to Léonard Bordas, to assist him in pursuing his investigations relating to insects attacking trees and forests, and more especially species which at the present time are devastating the woods of the central plateau and west of France.

3,000 francs to Joseph Bouget, botanist at the Pic du Midi Observatory, for realizing his cultural experiments on a larger scale, with special reference to the improvement of the pastures of the Pyrenees.

3,000 francs to Henry Devaux, professor of plant physiology at Bordeaux, for the continuation of his researches on the cultivation of plants in arid or semi-desert regions.

2,000 francs to Victor Piraud, for the continuation of his studies on the fauna of Alpine lakes and torrents, particularly at high altitudes.

2,000 francs to Marc Tiffeneau, for the continu-

ation of his studies on the phenomena of molecular transposition in organic chemistry.

In conformity with authorization by the minister of justice and public instruction a small expedition was despatched from the Argentine National Observatory at Córdoba to Venezuela to observe the total eclipse of the sun on February 3. The expedition is in charge of Astronomer Chaudet and is equipped with two cameras for photographing the corona, two prismatic cameras for the flash and coronal spectrum, a small slit spectrograph and a photometer. It was expected to occupy a station in or near Tucacas.

The post of mining geologist in the ministry of agriculture and commerce of China has been offered to Dr. Warren D. Smith, professor of geology in the University of Oregon. Dr. Smith went to the university in September, 1913, from the Philippines, where he was chief of the division of mines in the bureau of science. He had been in government service in the Philippines nine and a half years.

Dr. Otto Schoebl has resigned as assistant director of the quarantine laboratory, port of New York, health officers' department, to accept a position in the Bureau of Science, Manila, P. I.

Dr. William J. Means, one of the organizers of the Ohio State University and dean of the Starling-Ohio Medical University since the merger in 1907, has resigned, to take effect June 30, on account of impaired health and age.

Professor J. H. Faull, of Toronto University, recently spent nearly two weeks at the New York Botanical Garden in a study of herbarium material of the Polyporaceæ, with special reference to collections made in Ontario.

Professor H. V. Tartar, whose publications on the results of his research investigations with arsenical sprays have materially modified certain spraying practises, has been granted a two-year leave of absence as head of the Oregon Experiment Station Department of Chemistry, to pursue research work at some of the leading eastern universities.

Professor J. E. Kraus, research specialist

in horticulture at the Oregon Agricultural College, has been given a two-year leave of absence to continue studies in eastern universities. He will first spend some time with the U. S. Bureau of Plant Industry investigating certain pollination problems at Miami, Florida, after which he will begin his investigational studies at Chicago.

Dr. Charles S. Pancoast, Philadelphia, who went to Vienna in December, 1914, is now in charge of a 4,000-bed hospital at Munkacz in the Carpathians.

Dr. Aylmer May, principal medical officer of northern Rhodesia, has been selected by the British war office to undertake research work on the western front in connection with wound infection.

Dr. H. M. WOODCOCK, assistant to the late Professor E. A. Minchin, has been appointed acting head of the department of protozoology at the Lister Institute, London.

The Minnesota and Wisconsin Chapters of the Society of Sigma Xi have established an annual exchange lectureship. For the present year President Charles R. Van Hise will represent Wisconsin in a lecture at the University of Minnesota on March 17. Professor E. M. Freeman will be the Minnesota representative in a lecture at the University of Wisconsin at some date during the second semester.

Professor William T. Councilman, of Harvard University, will lecture before the Experimental Medicine Section of the Cleveland Academy of Medicine on February 11. His subject is "Glioma."

The sixth lecture of the Harvey Society series delivered at the New York Academy of Medicine, on February 5, was by Dr. Hideyo Noguchi, of the Rockefeller Institute for Medical Research, on "Spirochetes."

The Guthrie lecture of the Physical Society was delivered at the Imperial College of Science on January 28, by Mr. W. B. Hardy, on the subject "Some Problems of Living Matter."

The Prussian ministry of public instruction has ordered the erection of a bust of von

Behring in the Marburg Institute for Hygiene in memory of the twenty-fifth anniversary of Behring's publication of his work on serum therapy.

On recommendation of the council of the Biological Society of Washington the following resolution drawn up by L. O. Howard, Frederick V. Coville and Paul Bartsch has been adopted:

WHEREAS, Dr. George M. Sternberg, former Surgeon General of the U. S. Army, a distinguished worker in the biological sciences as applied to medicine, long time an active member of the Biological Society of Washington and its president during the years 1895 and 1896, has passed from this life, therefore be it

Resolved, That the Biological Society of Washington keenly regrets his death and offers its warmest sympathy to Mrs. Sternberg, and will always be grateful to his memory for the important part which he took in the affairs and discussions of the Society and for the distinction which his eminent name adds to its list of past-presidents.

Dr. Thomas H. Russell, professor of clinical surgery in the Yale Medical School and surgeon at the New Haven General Hospital, died on February 3, at the age of sixty-three years.

Dr. Oswald Külpe, professor of philosophy and psychology at Munich, has died at the age of fifty-three years.

The death is announced of Dr. Georg Grüpler, who in his laboratories at Leipzig and Dresden carried on physiological and bacteriological research in connection with the proteins, the enzymes and bacteriological stains.

The Medizinische Klinik of December 26 as quoted in the Journal of the American Medical Association gives figures showing that the names of 1,084 physicians have appeared on the 400 casualty lists that had been published by that date in Germany. The list includes 37 civilian physicians, 377 active medical officers, 373 of the reserve force and 287 assistant medical officers. Of this total, 361 have been killed, 142 severely and 388 less severely wounded, 102 have been taken prisoners, and 90 are missing.

The University of Colorado Mountain Laboratory, which is now in its eighth year of operation, will hold a six-weeks' session, beginning on June 26, 1916. Courses in zoology are in charge of Professor Frank Smith, of the University of Illinois; those in botany will be given by Professor Francis Ramaley, of the University of Colorado, at Boulder. The mountain laboratory does not duplicate work of the regular college year, but offers courses primarily concerned with ecology and distribution. Most of those who attend are graduate students and high-school and college instructors.

UNIVERSITY AND EDUCATIONAL NEWS

Contracts have been let recently by the board of directors of the Texas Agricultural and Mechanical College for a new hospital for which the legislature recently appropriated \$50,000, and a new dairy barn to be erected at a cost of \$10,000. President Bizzell has announced that plans and specifications are about completed for the new Animal Husbandry Building to cost \$40,000 and a new hog cholera serum plant, for which \$15,000 are now available. Professor R. Adelsperger, head of the department of architecture and architectural engineering at the college, will begin immediately on plans and specifications for the new college auditorium to be erected at a cost of \$100,000 and a new Veterinary Medicine Building to cost \$100,000. funds for these two buildings will not be available until September 1, 1916.

A NEW forestry building costing \$40,000 has been authorized by the board of regents and will be erected on the Oregon Agricultural College campus during the coming spring and summer. It will be a brick structure, three stories high and 80 feet wide by 140 feet long. A large laboratory for logging-engineering will be located on the first floor, with smaller laboratories for the manufacture of wood products. The second and third floors will be occupied by offices, classrooms and smaller experimental laboratories. The building will be ready for occupancy at the opening of the next college year, September, 1916.