

sometimes included among the scientific bureaus.

The list of appropriations for scientific purposes is as follows:

UNDER THE TREASURY DEPARTMENT

Hygienic Laboratory, Public Health
and Marine Hospital Service \$90,000 00

UNDER THE NAVY DEPARTMENT

Hydrographic Office \$141,500 00
Naval Observatory 62,390 00
Nautical Almanac Office 21,240 00

UNDER THE INTERIOR DEPARTMENT

Patent Office \$1,288,150 00
Geological Survey 1,476,420 00

UNDER THE DEPARTMENT OF COMMERCE AND LABOR

National Bureau of Standards \$189,620 00
Coast and Geodetic Survey 992,316 40
Bureau of Fisheries 702,760 00

UNDER THE DEPARTMENT OF AGRICULTURE

Weather Bureau \$1,413,540 00
Bureau of Animal Industry 1,032,480 00
Bureau of Plant Industry 1,052,230 00
Forest Service 2,400,000 00
Bureau of Chemistry 697,920 00
Bureau of Soils 206,980 00
Bureau of Entomology 136,010 00
Bureau of Biological Survey 52,000 00
Office of Experiment Stations 1,013,220 00

Emergency Appropriations:

Cotton boll weevil investigations.. 190,000 00
Prevention of spread of gypsy and
brown-tail moths 150,000 00
Eradicating cattle ticks 150,000 00

Special Appropriations:

Survey of Appalachian and White
Mountain watersheds 25,000 00
Agricultural colleges, to each state
and territory 5,000 00
Total for the Department of Agriculture,
including building and deficiency
appropriations 9,638,590 00

UNDER THE SMITHSONIAN INSTITUTION

International Exchanges \$ 32,000 00
American Ethnology 43,000 00
International Catalogue of Scientific
Literature 5,000 00
Astrophysical Observatory 13,000 00
National Museum 250,080 00
National Zoological Park 110,000 00

Final appropriation for the new
building for the National Museum 1,250,000 00
Total under the Smithsonian Institution 1,703,080 00

MISCELLANEOUS

Government Printing Office, printing
for scientific bureaus \$824,450 00
Library of Congress 616,885 00
Botanic Gardens 29,893 73
Army War College 24,400 00
Naval War College 19,200 00
Army Engineer Survey of Northern
and Northwestern Lakes 75,000 00
Division of Topography, Postoffice
Department 47,900 00
Alaskan Seal Fisheries 11,430 00

SCIENTIFIC NOTES AND NEWS

ON the occasion of the dedication of the new buildings of the Carnegie Institution last week, honorary degrees were conferred by the Western University of Pennsylvania on a number of the foreign guests including Sir Robert Ball, Lowndean professor of astronomy and geometry in Cambridge University; Dr. P. Chalmers Mitchell, secretary of the London Zoological Society; Sir William Preece, the British electrical engineer, and Dr. F. S. Archenbold, director of the Treptow Observatory.

THE summer meeting of the American Chemical Society will be held at Toronto, June 27-29. The following persons will act as chairmen of the various sections:

Physical Chemistry: W. D. Bancroft.
Inorganic Chemistry: C. L. Parsons.
Organic Chemistry: J. B. Tingle.
Agricultural, Sanitary and Biological Chemistry:
F. T. Shutt.
Industrial Chemistry: W. H. Ellis.

DR. ALEXANDER GRAHAM BELL will shortly go to England to receive the doctorate of laws from Oxford University.

PROFESSOR W. W. KEEN, of Philadelphia, a delegate to the Surgical Congress at Berlin, has been elected an honorary member of the German Surgical Society.

J. M. STEDMAN, professor of entomology in the University of Missouri and entomologist of the Experiment Station, has been granted

leave of absence for seventeen months, which he will spend in study and in travel abroad, and also in research at the Naples Zoological Station.

SIR PHILIP MAGNUS, M.P., is engaged in an inquiry for the Cardiff Education Authority with reference to possible improvements in the technical instruction and other branches of education in the city.

THE council of the Royal Geographical Society has awarded the Founder's Medal to Dr. Francisco Moreno, who has for twenty years been occupied in exploring South America, especially Patagonia and the southern Andes, and the Patron's Medal to Dr. Roald Amundsen, the Norwegian explorer, who recently completed the northwest passage for the first time in a ship. The Murchison bequest has been awarded to Captain G. E. Smith for his various important surveys in British East Africa; the Gill Memorial to Mr. C. Raymond Beazley for his work in three volumes on 'The Dawn of Modern Geography,' the result of many years' research; the Back bequest to Mr. C. E. Moss for his important researches on the geographical distribution of vegetation in England; and the Cuthbert Peek Fund to Major C. W. Gwynn, C.M.G., D.S.O., R.E., for the important geographical and cartographical work which he carried out in the Blue Nile region and on the proposed Sudan-Abyssinian frontier.

THE Tiedemann Prize, awarded every fourth year by the Senckenberg Society at Frankfort a. M. to the German writer who has produced the best work along the lines of comparative anatomy and physiology has been awarded this year to Dr. E. Buchner of Berlin for his researches on fermentation.

ON the invitation of President Schurman, Professor Burt G. Wilder, of Cornell University, will give a memorial address on May 28, to commemorate the one hundredth anniversary of the birth of Louis Agassiz.

THE Princeton correspondent of the New York *Evening Post* states that Professor Alexander T. Ormond will lecture on philosophical and educational subjects before the Johns Hopkins University, the University of Vir-

ginia, the University of Tennessee, Grant University of Chattanooga, Vanderbilt University, the University of Georgia, Tulane University, the University of North Carolina, and the University of South Carolina.

PROFESSOR W. P. BRADLEY, of Wesleyan University, who designed the liquid air plant recently installed for the Sheffield Scientific School, Yale University, lectured on March 21 on 'Liquid Air as prepared and used at the Cryogenic Laboratory of Wesleyan College.'

At the meeting of the Davenport Academy of Sciences on March 30, Professor Herbert Osborn, of the Ohio State University, gave a lecture on 'Eccentricities of Insect Life,' illustrated by a series of lantern slides.

ON the occasion of the fiftieth anniversary of his graduation in medicine, Professor Ernst Haeckel of Jena was made a privy medical councilor with the title of *Exzellenz*. He practised in Berlin before taking up the work in natural science which made him famous.

THE building erected by Mr. Andrew Carnegie for the United Engineering Societies was dedicated this week. On Tuesday afternoon addresses were made, if the announcements of the program were carried out, by Mr. Andrew Carnegie and President Arthur T. Hadley. In the evening there was to be a reception at which the officers of the different societies would receive in their rooms. On Wednesday afternoon addresses were announced by Dr. Samuel Sheldon, president of the American Institute of Electrical Engineers; Dr. Frederick R. Hutton, president of the American Society of Mechanical Engineers, and Dr. John H. Hammond, president of the American Institute of Mining Engineers. The John Fritz medal was to be presented to Dr. Alexander Graham Bell and medals for distinguished services to Dr. Ralph W. Pope and Professor Frederick R. Hutton. Meetings of the societies were to be held on Thursday and Friday.

THE American Electro-chemical Society will meet at the University of Pennsylvania on May 2, 3 and 4, 1907.

THE College of Physicians of Philadelphia announces that the next award of the Alvar-

enga prize, being the income for one year (\$180) of the bequest of the late Señor Alvarenga, will be made on July 4, provided that an essay deemed worthy of the prize shall have been offered.

THE National Museum of Wales has obtained a charter of incorporation.

PLANS and particulars of land for the erection of the new Solar Physics Observatory at Hindhead have been placed before the British Minister of Education.

THE Lake Laboratory of Ohio State University announces for the season of 1907 courses in general zoology, embryology, entomology, ichthyology, ornithology, invertebrate morphology, experimental zoology, vertebrate comparative anatomy, aquatic biology, research work, general botany, ecology and special work in botany. The staff for the season includes, besides the director, Professors L. B. Walton, Ph.D., Kenyon College; Malcolm Stickney, A.M., Denison University; Lynds Jones, Ph.D., Oberlin College; Charles Brookover, M.S., Buchtel College, and W. B. Herms, A.M., Ohio Wesleyan University. The laboratory offers free tables for independent investigators and will welcome any who have problems in biology which can be studied to advantage at the laboratory. The laboratory will be open for instruction courses from June 24 to August 2 and for investigators from June 24 to about September 15. Applications may be sent to the director, Professor Herbert Osborn, Ohio State University, Columbus, O.

THE University of Wisconsin Agricultural Experiment Station is conducting a campaign against the spread of bovine tuberculosis among the 100,000 dairy herds of the state. A bill has just been introduced into the legislature providing for the testing of all cattle before they are sold. The existing laws, providing for the inspection of cattle before they are brought into the state, protect dairymen from infection from outside the state, and the faculty of the college of agriculture is working toward similar protection within the state to prevent the spread of tuberculosis from infected herds to others. Dr. H. L. Russell, of

the department of bacteriology of the university, who is also a member of the Live Stock Sanitary Board of Wisconsin, has given instructions in the use of the tuberculin test to 1,200 young farmers from all over the state, former students in the college of agriculture who now compose the membership of the University Agricultural Experiment Association.

Nature gives the following scientific subjects for which prizes are offered by the Reale Instituto Lombardo for the Cagnola prize, April, 1907, on the discovery of radioactivity and its influence on modern physical and chemical theories; for 1908, on the present state of metallography in relation to the physical properties of metals, particularly iron and steel, a general summary including some original results for the Fossati prize for 1907, on the so-called nuclei of origin and termination of the cranial nerves; for the Kramer prize for 1907, a discussion with certain practical applications of Guglielmini's hydraulic theories; for the Secco Comneno prize for 1907, a discovery relating to the virus of rabies; for 1911, on the physiological action of high-frequency currents. As in previous years, other prizes are offered for literary and commercial subjects and for subjects which are the same every year. For the present year the prize awards of the Reale Instituto Lombardo include a Cagnola prize of £100 and medal of value £20 to Dr. Augusto Moschini, of Pavia, for his essay on the pathology of the suprarenal capsules; a prize of £80 to Dr. Guido Sala, of Pavia, and awards of £20 to Professor Domenico Lo Monaco and G. Pitò, of Rome, for essays on the anatomy of the visual centers of higher vertebrates under the Fossati foundation; and Kramer prizes of £80 each to Ernesto Canalli, of Naples, and Mario Baroni, of Milan, for essays on the resistance of structures in cement.

THE U. S. Geological Survey has completed a line of spirit levels through Death Valley, California, and has ascertained that the depth of that area is not so great as was supposed. The final computations of the results have not yet been made, but the preliminary figures give for the lowest point a depth of 276 feet below

sea level. Bennetts Well, which is near this point, is 266 feet below sea level. These figures are probably not more than three feet in error. The Geological Survey now has elevation marks on the highest and lowest points of dry land in the United States. It is a coincidence that these two extremes are both in southern California and only 75 miles apart. Mount Whitney is a foot or two over 14,500 feet above sea level, while Death Valley, as above stated, is 276 feet below. Before the Salton Sink, also in southern California, was flooded by the Colorado River, it contained the lowest point of dry land in the United States, a spot 287 feet below sea level. Previous estimates of the depth of Death Valley based on barometer readings gave for the lowest point figures varying from 250 to 450 feet below sea level.

Nature states that at the annual general meeting of the Geological Society on February 22, Sir Archibald Geikie, the president, described the arrangements contemplated for the celebration of the society's centenary next September. Invitations to attend the meetings will be sent to all the foreign members and foreign correspondents of the society, and geological societies, geological surveys, and learned institutions which have a geological side, will be asked to send delegates. Personal invitations will also be addressed to geologists of note in the old and the new world, who are not already enrolled in the foreign lists of the society. The official program will probably extend over three days in London. The arrangements for each of these three days are under consideration, but Sir Archibald Geikie proposes to give his presidential address as the *pièce de résistance* of one of the forenoon or afternoon meetings. In that address he will offer a sketch of the state of geological science outside Britain at the time when the Geological Society of London was founded, and indicate the external influences that affected its start. By this choice of a subject he hopes to interest the foreign guests, while at the same time inviting the fellows of the society into a domain of the history of science which

is perhaps less familiar than it deserves to be. The chronicle of the society itself during the first hundred years of its existence has been carefully and fully compiled from all available sources by Mr. Horace B. Woodward for publication in volume form. Excursions to places of geological note in Great Britain will probably be arranged, some to precede and others to follow the meeting in London. The various museums and places of interest in the metropolis will, of course, be shown to the expected visitors, and there will doubtless be no lack of public and private hospitality. It is anticipated that the Universities of Oxford and Cambridge will both receive the foreign guests.

UNIVERSITY AND EDUCATIONAL NEWS

THE Drapers Company has decided to continue its grant of £800 a year for the stipend of the professor of agriculture at Cambridge for another period of ten years. The company has also given £200 for the completion of the astronomical equipment of the University of London.

MRS. RUSSELL SAGE has given \$150,000 to the Northfield (Mass.) Seminary for a new chapel and a music building.

THE Johns Hopkins University will hereafter admit women to graduate courses in cases where no objection is made by the instructors. Women have been admitted to the medical department of the university since its opening in 1893.

THE London University holiday course for foreigners will be held from July 22 to August 26.

It has been decided by the council of the University of Leeds to create a separate chair of botany. This has arisen out of the resignation of Professor Miall, who combined the teaching of botany with zoology.

DR. W. PEDDIE, lecturer in natural philosophy in the University of Edinburgh, has been appointed to the Harris chair of physics in University College, Dundee, in succession to Professor Kuenen.