

ography including 89 titles. It constitutes a valuable addition to our knowledge of the embryology of a family whose place in the system of plants is still in doubt.

A HELPFUL BULLETIN.

THE office of experiment stations of the United States Department of Agriculture has issued a bulletin (No. 2) consisting of an outline of a lecture on 'Potato Diseases and their Treatment,' for the use of farmers' institute lecturers. It was prepared by F. C. Stewart and H. J. Eustace, of the New York Experiment Station. It contains summaries of our knowledge of the most important diseases which affect the potato in the United States. The descriptions are given in non-technical language, and ought to convince every botanist of the possibility of treating quite difficult subjects in plain English. Following the description of diseases, is an admirable chapter on spraying and other preventive measures. A very useful bibliography is added in an appendix.

CHARLES E. BESSEY.

THE UNIVERSITY OF NEBRASKA.

THE NOBEL PRIZES.

IN a cablegram from Stockholm to the London *Times*, dated December 10, further details are given in regard to the Nobel prizes.

The prize for physics has been awarded to Lord Rayleigh, professor of natural philosophy at the Royal Institute. The chemistry prize is conferred upon Sir William Ramsay, professor of chemistry at University College. M. Pavloff, professor at the Military Academy of Medicine at St. Petersburg, receives the prize for physiology and medicine. The literature prize is divided between M. Mistral, the Provençal poet, and Don Jose Echegaray, the Spanish dramatist. The peace prize has been awarded to the Institute of International Law.

The distribution of the Nobel prizes took place in the great hall of the Academy of Music at Stockholm in the presence of King Oscar. Lord Rayleigh, Professor Ramsay and M. Pavloff received their prizes, together with diplomas and gold medals, in person

from his Majesty, while the prizes awarded to M. Mistral and Don Jose Echegaray, who were unable to be present, were handed to the French and Spanish ministers respectively. The sum of money attaching to each prize amounts to 140,858 kroner (about \$39,000). The Nobel peace prize will be presented by the Norwegian Storting at Christiania.

The distribution of the prizes was followed by a banquet at the Grand Hotel. Covers were laid for 190 guests, the company including the Crown Prince, Prince and Princess Charles, Lord and Lady Rayleigh, Sir William and Lady Ramsay and M. and Mme. Pavloff. Count Mörner, speaking in German, proposed the health of M. Pavloff; Professor Petterson, in English, proposed the health of Sir William Ramsay; and Professor Hasselberg, in Latin, that of Lord Rayleigh.

SCIENTIFIC NOTES AND NEWS.

At the meeting of the American Association for the Advancement of Science held at Philadelphia last week, Professor C. M. Woodward, of Washington University, was elected president for the New Orleans meeting.

At the recent Philadelphia meeting of the American Society of Naturalists, Professor William James, of Harvard University, was elected president. Professor Chas. B. Davenport, of the Cold Spring Laboratory of Experimental Evolution of the Carnegie Institution, and Professor J. M. Coulter, of the University of Chicago, were elected vice-presidents, and Professor W. E. Castle, of Harvard University, secretary.

PROFESSOR MARY WHITON Calkins of Wellesley College, has been elected president and Mr. Wm. Harper Davis, of Lehigh University, secretary, of the American Psychological Association.

PROFESSOR JOHN DEWEY, of Columbia University, has been elected president of the American Philosophical Association.

PROFESSOR S. W. BURNHAM, astronomer at the Yerkes Observatory, has been awarded the Lalande gold medal of the French Academy of Sciences for his researches in astronomy.

PROFESSOR SVANTE ARRHENIUS has been made head of a laboratory for physical chem-

istry, to be established at Stockholm by the Nobel Institute.

PROFESSOR E. E. BARNARD, of Yerkes Observatory, will join Professor George E. Hale at the branch of the observatory on Mt. Wilson, Cal. He will take with him the Bruce 10-inch photographic telescope and will spend the rest of the winter and next summer in making photographs of the sun.

M. VIEILLE has been elected a member of the Paris Academy of Sciences in the Section of Mechanics, and M. Dastre a member in the Section of Medicine and Surgery.

PROFESSOR TANMANN, of Göttingen, has received from the German Society of Engineers the sum of 5,000 Marks for experiments on the melting point of alloys.

THE superintendent of government laboratories for the Philippines, Dr. Paul C. Freer, formerly professor of chemistry at the University of Michigan, is at present in the United States on a leave of absence.

MR. GEORGE V. NASH and Mr. Norman Taylor returned late in December to the New York Botanical Garden from an exploring tour around the island of Inagua in the Bahamas. The expedition secured a valuable collection of living and preserved plants, including many massive specimens of the few cacti native to the island.

DR. C. HART MERRIAM, chief of the Biological Survey of the Department of Agriculture, lectured at Stanford University on December 15. He has since returned to Washington.

MR. CHARLES F. LUMMIS, of Los Angeles, Cal., lectured before the New York Society of the Archeological Institute of America on December 22, his subject being 'The Primitive Music of the Southwest.'

LORD RAYLEIGH delivered a lecture at the Academy of Sciences, Stockholm, on December 13, on 'The Density of Gases.'

A WINDOW in the cathedral at Norwich in memory of the late William Cadge, an eminent surgeon of the city, was unveiled on December 6, by the president of the Royal College of Surgeons.

MR. EUGENE G. BLACKFORD, of Brooklyn, a fish merchant who made many contributions

to ichthyology and did much to promote its study, died on December 28, at the age of sixty-five years.

MR. FRANCIS H. NICHOLAS, a newspaper correspondent of New York City, has died in Tibet, where he was making explorations.

WE regret also to record the deaths of M. Bernard Renault, assistant in paleontology in the Paris Museum of Natural History, at the age of sixty-eight years; of Dr. I. N. Goroschankin, professor of botany at Moscow at the age of sixty years; of M. André Lefèvre, professor of ethnology at Paris School of Anthropology at the age of seventy years, and of Dr. Karl Koester, professor of pathology at Bonn.

MR. ROBERT H. SAYRE, president of the Board of Trustees of Lehigh University, has presented the institution with an annex to the Sayre Observatory founded by him in 1860. The building, designed by Professor C. L. Thornburg, contains a zenith telescope, made by Warner and Swasey and presented to the university by Mr. Sayre.

ONE of the most valuable contributions of scientific material yet made to the New York Botanical Garden has recently been received from Sir William Dyer, director of the Royal Gardens at Kew, England, consisting of many thousand herbarium and museum specimens of lichens, duplicates from the famous lichen herbarium formed by the Rev. W. A. Leighton, of Luciefelde, Shrewsbury, and presented by him to the Royal Gardens in 1882.

THE *British Medical Journal* states that at a sitting of the Paris Académie de Médecine held on December 14 the names of the successful candidates for the various prizes offered for medical researches of one kind or another were announced. The Audiffred prize of £960 for the best work on tuberculosis was not awarded, but sums varying from £60 to £20 were given, by way of encouragement, to Dr. Armand Delille, of Paris, for an investigation of the part played by the poisons generated by Koch's bacillus in tuberculous meningitis and tuberculosis of the nerve centers; to Dr. Nattan-Laurier, of Paris, for a research on mammary tuberculosis; to Dr. Pautrier,

of Paris, for one on atypical forms of cutaneous tuberculosis; and to Dr. Lalesque, of Arachon, for a memoir on the sea and consumptives. The Baillarger prize for £80 for researches on mental diseases was awarded to Dr. Paul Sérieux for a series of reports on the treatment of insanity and the organization of asylums. The Adrien-Buisson prize of £420 was awarded to MM. E. Leclainche, professor in the Veterinary School of Toulouse, and H. Vallée, professor in the Veterinary School of Alfort, for researches on symptomatic anthrax and gangrenous septicæmia. The Campbell-Dupieris prize of £92 was awarded to Dr. J. Tissot, of Paris, for an experimental investigation on the exchange of gases in the arterial blood, the ventilation of the lungs, and arterial pressure during chloroform anæsthesia. The Daudet prize of £40 was awarded to Professor Monprofit of Angers for a memoir on tumors; to the same surgeon also fell the Huguier surgical prize of £120 for essays on the surgery of the ovaries and Fallopian tubes, and on salpingitis and ovaritis. The Theodore Herpin (de Genève) prize of £120 was awarded to Drs. P. E. Launois and Pierre Roy, of Paris, for a biological study of giants. The Jacquemier obstetrical prize of £68 was awarded to Dr. Bouchacourt, of Paris, for a series of memoirs on the applications of radiography to midwifery; while Dr. Briquet, of Nancy, gained the Tarnier prize of £120 for a work on tumors of the placenta. The Laborie surgical prize of £120 was awarded to Drs. J. Hennequy and R. Loewy, of Paris, for a monograph on the treatment of fractures of the long bones. The Louis prize of £120 was awarded to Dr. Victor Balthazar, of Paris, for a memoir on the serumtherapy of typhoid fever, and the Saintour prize of £172 to Drs. Fernand Bezançon and Marcel Labbé for a treatise on hæmatology. A considerable number of prizes of smaller value was awarded to various competitors.

WE learn from the *British Medical Journal* that Professor Koch expected to start on a new expedition of scientific exploration on December 17. He will first proceed to Dar es Salam in German West Africa for the purpose of completing the researches on cattle

plague begun by him in South Africa. These investigations were directed to purely practical objects, while questions of importance from the scientific point of view had to be left untouched. These questions will now in the first instance engage Professor Koch's attention, but he will also study other tropical diseases affecting animals and man. As occasion arises he will go to other places suitable for purposes of research. Professor Koch estimates that he will be away six months. On December 11 a dinner was given by a committee formed to celebrate the completion of his sixtieth year.

THE report of the Meteorological Council for the year ending March 31, 1904, to the president and council of the Royal Society has been issued as a Blue-book. According to an abstract in the *London Times* it is stated at the outset that a meeting of the International Meteorological Committee was held at Southport during the session of the British Association at that place. Among the subjects then raised was the very important question of the units adopted in different countries for meteorological measurements. In the United Kingdom, its colonies and dependencies, and in the United States the inch and the Fahrenheit degree have always been used for the measurement of pressure and temperature, whereas in the rest of the world the millimeter and the centigrade degree have been adopted. The council state that if they can obtain a satisfactory consensus of opinion as to the method of measurement which will probably commend itself to the approval of all civilized countries, they are prepared to give effect to proposals for the adoption of that method in this country without delay. After discussing other matters dealt with by the international committee, such as the report of the sub-committee on cloud observations and the relation between solar and terrestrial changes, the council proceed to state that the office has been in communication with the Deutsche-Seewarte and the Meteorological Institute of the Netherlands with regard to the 7 A.M. service of telegraphic reports. In order to obtain reports at that hour from the east coast of England, a special sta-

tion was established at Skegness. Reports have also been obtained from Portland Bill, and Malin Head has taken the place of Blacksod Point. A station was still required, however, on the south coast of Ireland to complete the requirements of the two continental offices. In other respects the arrangements for weather telegrams between this country and the continent of Europe, the Azores and the United States remained the same as in the preceding year. The council regret that the practical extension of wireless telegraphy has not enabled them to increase the area of observation to the westward by information obtained from Atlantic liners by that means.

UNIVERSITY AND EDUCATIONAL NEWS.

LORD RAYLEIGH proposes to present to Cambridge University the value of the Nobel prize for physics which has just been awarded to him.

THE secretary of the University College of North Wales has announced that the recent bequest to the college by the late Dr. Isaac Roberts, the astronomer, is expected to realize £15,000.

THE University of Edinburgh has received a gift of £25,000 from Sir Donald Currie for the establishment of lectureships. £5,000 may, however, be used for the purchase of a site for new laboratories. The university has also received £15,000 from other sources.

IN accordance with the will of George Smith, '53, of St. Louis, filed in March, 1902, the treasurer of Harvard University has received in cash and securities a payment of \$257,550.66. When this fund reaches \$450,000 by accumulation, three new dormitories are to be erected. They will be named the James Smith Hall, the Persis Smith Hall, and the George Smith Hall.

It is reported that general plans for the new Yale library to be built from the Ross legacy of \$250,000 are definitely settled. The Chittendon wing will be preserved, and the first part of the new library will probably be built between that wing and the present old university library, which will thus be preserved for some years. The new structure

will probably use up the whole legacy of \$250,000, and will supply all university library needs for twenty-five years to come.

HOLLIS HALL, the oldest dormitory of Harvard University in use, was damaged by fire to the extent of \$5,000 on December 29.

THE Columbia University Council has authorized the degree of graduate in pharmacy to be conferred, as in the past, by the New York College of Pharmacy, but has provided for the establishment of a course of higher grade leading to the degree of pharmaceutical chemist.

A SCHOOL of veterinary medicine and surgery was opened at the University of Liverpool on December 13.

THE Association of American Universities will meet at Johns Hopkins University, in Baltimore, on January 12, 13 and 14. The following are the delegates: California, Professor B. I. Wheeler, Professor Irving Stringham, Professor Leuschner; Catholic, Dr. E. A. Pace, Dr. M. F. Egan; Chicago, President W. R. Harper, Professor A. W. Small; Clark, President G. S. Hall; Columbia, Professor Monroe Smith, Professor W. H. Carpenter, Professor Henry M. Howe, Professor E. D. Perry, Mr. F. P. Keppel; Cornell, Dean Thomas F. Crane; Harvard, President C. W. Eliot, Dean J. B. Ames, Professor T. N. Carver; Johns Hopkins, President Remsen, Professor Gildersleeve, Professor Welch; Leland Stanford, Jr., Professor A. H. Suzzallo, Professor E. P. Cubberley; Michigan, Professor A. C. McLaughlin; Pennsylvania, Dean J. H. Penniman, Professor J. C. Rolfe, Dean Clarence G. Childs; Princeton, Professor A. F. West, Professor W. M. Daniels, Professor H. B. Pine; Virginia, Dean J. M. Page, President E. A. Alderman; Wisconsin, President Charles R. van Hise; Yale, President A. T. Hadley.

JOHN ROBERT SIM, assistant professor of mathematics in the College of the City of New York, has been made head of the department of pure mathematics.

DR. OSKAR BREFELD, professor of botany at Breslau, has retired from active service.