

SCIENTIFIC NOTES AND NEWS.

DR. C. H. TITTMANN, chief of the Coast and Geodetic Survey, has left Washington for Alaska, where he will meet Dr. W. P. King, chief astronomer of Canada, in order to mark the boundary line between Alaska and Canada in accordance with the decisions of the commission that met last year in London.

MR. BAILEY WILLIS, of the U. S. Geological Survey, has returned from China, where he has been making geological explorations under the auspices of the Carnegie Institution.

PROFESSOR CHARLES E. BESSEY, of the University of Nebraska, is visiting the Minnesota Seaside Laboratory at Vancouver Island.

PROFESSOR H. H. RUSBY, of the New York College of Pharmacy, is at the Kew Botanical Gardens studying the herbaria from South America.

DR. T. HOMÉN, professor of physics at the University of Helsingfors, and three other professors of the university have been deported to Russia as a consequence of the assassination of General Bobrikoff. It is taken for granted that these professors had no connection with this crime, but in any case the conditions must be regarded as unfortunate.

THE senate of Heidelberg University proposes to establish a gold medal in honor of Professor Kuno Fischer to be conferred once in five years for work on the history of philosophy in Germany.

THE Paris Academy of Sciences has decided to award its LeCompte prize of the value of \$10,000 to M. Blondlot for his researches on the so-called n-rays.

AT the celebration of the foundation of the University of Giessen on July 1, the rector, Dr. R. Brauns, made an address on the development of geology and mineralogy at the university since the year 1850.

A MEDALLION in memory of the late Sir George Gabriel Stokes, which has been erected in the north aisle of the choir of Westminster Abbey, was unveiled on July 7 by the Duke of Devonshire, chancellor of the University of Cambridge, and formally transferred to the authorities of the Abbey. Addresses were

made by Sir William Huggins, Lord Rayleigh and Lord Kelvin.

THE monument erected to the memory of Pasteur in the Place de Breteuil, Paris, was unveiled on July 16 by President Loubet. In addition to Mme. Pasteur, there were present numerous officers of the government, members of the diplomatic corps and men of science.

WE learn from the *Journal of the American Medical Association* that Professor Czerny has endowed a prize in honor of his deceased father-in-law, the famous clinician, Adolf Kussmaul. The sum of \$2,500 has been paid for the purpose to the Heidelberg University, and the income will be awarded every third year, on Kussmaul's birthday, February 22, for the best therapeutic achievement during the preceding three years, published first in German literature.

A PORTRAIT-BUST of Dr. Otto Kahler, formerly professor of medicine at Vienna, has been unveiled in the arcades of the school of medicine.

A PUBLIC meeting has been held at Bury, England, to celebrate the bi-centenary of the birth of John Kay, of Bury, inventor of the fly-shuttle, to promote a public fund for the erection of a statue in memory of the inventor and to institute scholarships.

MRS. MARY B. COULSTON, recently appointed assistant in agriculture in the University of California, died on July 17.

SIR JOHN SIMON, K.C.B., former vice-president of the Royal Society and president of the Royal College of Surgeons, well known for his important services on behalf of the public health, died on July 23, at the age of eighty-eight years.

MR. ALFRED H. ALLEN, the author of a well-known work in eight volumes on commercial organic analysis and of many papers on applied chemistry, died at Sheffield on July 14, at the age of sixty years.

DR. RUDOLPH AMANDUS PHILIPPI, for many years director of the Natural History Museum at Santiago, Chili, and the author of many contributions to zoology and botany, has died at the age of ninety-six years.

WE regret also to record the death of Dr. Gustav Hempel, professor of agriculture at

Vienna, and of Dr. Otto Christian Lovén, formerly professor of physiology at Stockholm.

M. ALFRED PICARD has been appointed commissioner of France at the St. Louis Exposition.

THE American Mathematical Society will hold its eleventh summer meeting at St. Louis on September 16 and 17. The headquarters will be at the Inside Inn on the Exposition grounds. Professors H. S. White, A. S. Chessin and E. R. Hedrick are the committee in charge.

THE French Association for the Advancement of Science meets at Grenoble from the fourth to the eleventh of August; the Swiss Association met at Wintherthur from July thirtieth to August the second.

THE International Botanical Congress will meet in Vienna next year from June twelfth to eighteenth.

THE trustees of the Percy Sladen Fund for the assistance of scientific research, the establishment of which with an endowment of \$100,000 we recently noticed, have held their first meeting, and will meet again in November to consider applications for grants.

ACCORDING to *Nature* the report of the committee on ancient earthworks and fortified enclosures was presented to the congress of archeological societies on July 6. The committee expresses regret that more archeological societies have not taken up the idea of compiling a schedule of the ancient defensive works in their respective districts; and it is urged upon the secretaries of societies to arrange, when possible, for the survey and scheduling of all such works as are included in the inquiry. The committee concludes the report by again impressing upon archeologists the importance of doing their utmost to prevent the destruction which from time to time threatens so many defensive enclosures of earth or stone.

The Journal of the American Medical Association states that the first subject for its prize essay is announced by the medical faculty of the University of Munich as follows: "It has been stated that mice can not be adequately nourished with pure food stuffs (albu-

min, fats, carbohydrates, mineral salts and water). Other investigators, on the other hand, have succeeded in accomplishing this. The faculty offers a prize for research in this line on pigeons, which can readily be fed on mixtures of the pure food stuffs." The subject announced for this year is given out again for further study for next year's competition: 'Study of the structure of the germinal vesicle in a large vertebrate.'

THE *Scotia*, bearing the Scottish Antarctic Expedition, under the leadership of Mr. Bruce, has returned to Glasgow, bringing, it is said, valuable collections.

REPORTS have been received from Dr. Max Uhle, who, since the beginning of the year, has renewed his archeological explorations on the coast of Peru, carried on by him through the liberality of Mrs. Phoebe A. Hearst for the department of anthropology of the University of California. Dr. Uhle made new excavations at Ancon, in several parts of the so-called necropolis, with a view to determining the relative ages of the cultures represented by the different kinds of mummies and objects. After abundant material for this purpose had been obtained, excavations were made a short distance south of Ancon. Here, in a hitherto unsuspected deposit free from mummies, remains of an early culture distinct in character from any other in Peru were found. After completing his investigations at this spot, Dr. Uhle proceeded northward along the coast toward Supe or beyond.

WE learn from the London *Times* that at the one hundred and fiftieth annual meeting of the Society of Arts held recently, the business consisted in the election of the new council and the reading of the report. The Prince of Wales was elected president for the third year in succession. The report stated that the society's Albert Medal had been awarded to Mr. Walter Crane in recognition of his services in the promotion of decorative art. The prizes given during the year included the Swiney Cup for a work on jurisprudence, the Owen Jones, Mulready, and North-London Exhibition Trust prizes for work by art students, and prizes for fire pre-

vention apparatus awarded at the International Fire Exhibition last year, while the Benjamin Shaw Trust prize is now under offer for a respirator for use in dangerous trades. The numbers of candidates at the examinations showed a large increase last year. The report concluded with some references to members of the society who had died during the past year, among the most memorable of whom were Sir Frederick Bramwell and Sir Henry Stanley.

'THE Economic Resources of the Northern Black Hills' is the title of an elaborate report recently published as Professional Paper No. 26 by the United States Geological Survey. The chief author of the paper is Dr. J. D. Irving, but chapters have been written by Mr. S. F. Emmons and Dr. T. A. Jaggar, Jr. The report is in two parts, the first part, on the general geology of the Northern Black Hills, being the work of Dr. Jaggar, and the second, on the mining geology of the region, that of Messrs. Irving and Emmons. The entire report fills 214 pages and includes over 40 illustrations. The area covered is comprised mainly within the Spearfish and Sturgis quadrangles, which were surveyed geologically in the summers of 1898 and 1899 under the direction of Mr. S. F. Emmons. These quadrangles include the major portion of the mineralized and productive territory, but as a few ore bodies that fall without its limits have been described the title has been expanded to cover the mining region of the northern Black Hills. Dr. Jaggar's treatment of the general geology of the district includes a discussion of its general structure, topography, drainage and stratigraphy. The intrusive porphyries are described in detail and the history of their intrusion is given. A description of the Algonkian, Cambrian, Ordovician, Carboniferous, Tertiary, and Quaternary formations of the district closes the first part of the report. In the second part of the report, which treats of the mining geology of the district, theoretical discussions are either excluded or made as brief as possible. The work is chiefly descriptive in character. The first four chapters describe (1) the ore deposits in Algonkian rocks, (2) those in Cambrian rocks, (3) those

in Carboniferous rocks, and (4) those in rocks of recent origin. A fifth chapter is devoted to detailed descriptions of particular mines in the district.

SIR THOMAS ELLIOTT, for the British Board of Agriculture, has sent the following reply to the Association of Chambers of Commerce, who urged the importance of establishing a national school of forestry: "The president of the Board of Agriculture and Fisheries fully recognizes the importance which attaches to the question of afforestation and to the provision of a national system of instruction in forestry. Steps have already been taken in more than one direction to give effect to the recommendations of the departmental committee which was appointed in 1902, under the chairmanship of Mr. R. C. Munro Ferguson, M.P., to inquire into the subject. Through the agency of the Commissioners of Woods and Forests a school of forestry has been established in the Forest of Dean, and a movement is on foot for securing a suitable area of land in Scotland for the purpose of demonstrating scientific forestry. The board have taken steps to secure the establishment of at least two lectureships in forestry in England, and some of the leading universities and agricultural colleges have been giving attention to proposals under this head. The agricultural departments of the University College of North Wales, Bangor, and of the Durham College of Science, Newcastle-upon-Tyne, appeared to offer special advantages as centers of instruction in forestry, and grants in aid of the establishment of schemes of education in the subject will be made by the board to those institutions. The board hope that the arrangements thus made will result in a considerable improvement of the facilities available in this country for the acquirement of a knowledge of practical forestry."

THE following, according to *Nature*, is a summary of the prizes offered by the Belgian Academy for 1904 and 1905: For 1904, in mathematics and physics, critical phenomena in physics, viscosity of liquids, study of n -linear forms where $n > 3$, thermal conductivity of liquids and solutions, each a prize of 600

francs; unipolar induction of Weber, 800 francs. In natural sciences, the Cambrian rocks of Stavelot (Belgium), 800 francs; modifications produced in minerals by pressure, 600 francs; development of *Amphioxus* (see *Bulletin*, 1904, No. 4, for corrected announcement), 1,000 francs; effects of osmotic pressure in animal life, and Devonian flora of Belgium, each 600 francs; heterœcism of parasitic fungi, 800 francs; and physiological action of histones, 1,000 francs. All memoirs to be written in French or Flemish, and sent in before August 1, 1904. For 1905, in mathematics and physics, combinations of halogens, 1,000 francs; physical phenomena accompanying mutual dissociation of liquids, 800 francs; linear complexes of the third order, 600 francs; principal terms in the periodic deviations of the vertical, 600 francs. In natural science for the same year, effect of albuminoids in nutrition, reproduction of *Dicyemidæ*, formations intermediate between the Bruxellian and Tongrian in Brabant, geological age of certain Oligocene deposits in Belgium, sexuality of the individuals resulting from division of a single ovum in certain diœcious plants; prizes, 1,000 francs for each of these five subjects; silicates of Belgian rocks, etc., 800 francs. In addition to these ordinary prizes the academy will award the following: June 30, 1905, a Charles Lemaire prize relating to public works; June 30, 1904, a Louis Melsens prize for applied chemistry or physics; December 31, 1904, a Charles Lagrange prize for terrestrial physics; on May 1, 1906, a Selys Longchamps prize for researches on the Belgian fauna; on December 31, 1904, a Théophile Gluge prize for physiology; and in 1906 a François Deruyts prize for higher synthetic or analytic geometry.

UNIVERSITY AND EDUCATIONAL NEWS.

THE Board of Aldermen, New York City, has appropriated \$5,000,000 for the erection of new school buildings, and \$316,000 for recreation centers, vacation schools and playgrounds.

THE Company of Goldsmiths has given £5,000 to the University of London for poly-

technic work at the Institute at New Cross recently given by the company to the university.

WE learn from the London *Times* that the negotiations between the hebdomadal council of the University of Oxford, the council of the senate of the University of Cambridge, and the senate of the University of London, with a view to the establishment of a system of mutual recognition of entrance examinations and certificates which exempt from entrance examinations, have resulted in a report by a committee of representatives appointed by the three bodies. On the report the London senate, who have adopted a resolution expressing their general approval of the suggested scheme, and their willingness to make an arrangement with the Universities of Oxford and Cambridge, or either of them, upon the basis of the proposal contained therein. The council of the senate of the University of Cambridge have already expressed their readiness to recommend that university to adopt the scheme. The matter is still under the consideration of the hebdomadal council of the University of Oxford.

BURTIS BURR BREESE, Ph.D. (Columbia), now of the University of Tennessee, has been appointed professor of psychology at the University of Cincinnati.

AT Johns Hopkins University, Dr. C. K. Swartz has been appointed instructor in geology and paleontology, and Dr. James Barnes assistant in physics.

AT a recent meeting of the board of trustees of Lehigh University the following were promoted to assistant professorships: In chemistry, Dr. W. B. Schober; in biology, Dr. R. W. Hall; in English, Dr. Chas. H. Whitman; in civil engineering, Mr. W. L. Wilson.

DR. LOUIS G. HEYN has been appointed assistant to the chair of chemistry in Miami Medical College, Cincinnati.

DR. WM. LITTERER has been elected professor of histology, pathology and bacteriology in the medical department of Vanderbilt University, to succeed Dr. Louis Leroy, resigned.

M. MANGIN, of the Lycée Louis le Grand, has been appointed professor of botany in the Paris Museum of Natural History.