

rest almost within sight of the laboratory which he greatly loved, and which is his enduring monument.

SCIENTIFIC NOTES AND NEWS

DR. R. W. WOOD, professor of experimental physics at the Johns Hopkins University, has been elected a corresponding member of the Royal Society of Sciences of Göttingen.

DURING Dr. T. C. Mendenhall's recent visit to Japan, where he held the chair of physics in the Imperial University from 1878 to 1881, the Emperor bestowed on him the decoration of the Sacred Treasures, 2d class, and the National Educational Society conferred on him its gold medal.

AT the recent centenary celebration of the University of Breslau, an honorary degree was conferred upon Dr. Theobald Smith, professor of comparative pathology at Harvard University.

THE Royal Statistical Society of London has awarded a Guy medal in gold to Mr. G. Udny Yule.

DR. EDWARD SCHÄFER, professor of physiology at Edinburgh, has been elected a member of the Imperial Academy of Sciences at Halle.

THE Imperial Academy of Japan has awarded a medal and testimonial to Dr. Kimura for his discovery of the term in the variation of latitude known by his name.

PROFESSOR A. A. MICHELSON, head of the department of physics at the University of Chicago, has been the exchange professor at the University of Göttingen during the summer semester of 1911.

AMONG Americans who had expressed their intention to be present at the meeting of the British Association beginning this week in Portsmouth are: Professor Cleveland Abbe and W. J. Humphreys, U. S. Weather Bureau; Professor Carl Barus, Brown University; Professor A. A. Michelson, the University of Chicago; Professor F. W. Clarke, U. S. Geological Survey; Professor J. W. Spencer, Washington; Professor H. Webster, Univer-

sity of Nebraska; Dr. A. Goldenweiser, Columbia University; Professor H. C. Cowles, University of Chicago, and Professor A. A. Noyes, Massachusetts Institute of Technology.

PROVOST EDGAR F. SMITH, of the University of Pennsylvania, is on his way to Europe as the representative of his university at the celebration of the five hundredth anniversary of the founding of the University of St. Andrews in Scotland and the one hundredth anniversary of the founding of King Frederick University in Christiania, Norway. By August 17 he hoped to reach the University of Göttingen in order to celebrate on that day the thirty-fifth anniversary of his receiving the degree of doctor of philosophy at this university.

DR. L. H. BAILEY, whose resignation as director of the New York State College of Agriculture was announced last month, states that he will remain at Cornell until his successor is chosen.

MR. F. W. TAYLOR, of Denver, has been appointed director of agriculture in the Philippines.

DR. FITTING, associate professor at Halle, has been appointed director of the Hamburg Botanical Institute.

It is announced in *Nature* that Mr. C. E. Adams, of the Department of Lands, New Zealand, has been appointed astronomical observer at Wellington in succession to Mr. T. King, who has resigned. Mr. T. Southwell, scientific adviser to the Ceylon Company of Pearl Fishers, Ltd., and inspector of pearl banks, Colombo, has been appointed deputy director of fisheries, Bengal.

MR. ARTHUR A. ALLEN, instructor in neurology and vertebrate zoology in Cornell University, will spend the next year in South America as chief of an expedition organized by the American Museum of Natural History. The expedition will go to Colombia, its immediate object being to explore ruins and collect antiquities.

THE death is announced of Dr. Frank P. Foster, for more than thirty years editor of

the *New York Medical Journal* and prominent for his contributions to medical organizations.

THE death of Dr. Charpy, professor of anatomy at the Faculté de médecine de Toulouse, is announced.

THE U. S. Civil Service Commission announces an examination to fill a vacancy in the position of metallurgical chemist in the Bureau of Mines, for field duty, at a salary of \$3,000 per annum.

WE learn from *Nature* that the geological and archeological collections made by the late Rev. E. Maule Cole, all the objects of which are connected with East Yorkshire, have been presented to the Hull Municipal Museum by Lady Philadelphia Cole.

THE third National Conservation Congress will be held in Kansas City, September 25, 26 and 27, 1911. The general objects of the National Conservation Congress as set forth in its constitution are (1) To provide for discussion of the resources of the United States as the foundation for the prosperity of the people. (2) To furnish definite information concerning the resources and their development, use and preservation. (3) To afford an agency through which the people of the country may frame policies and principles affecting the conservation and utilization of their resources, to be put into effect by their representatives in state and federal governments.

THE seventh International Esperanto Congress began at Antwerp on August 21 with 1,700 delegates, including 60 from America. The U. S. departments of state, war and commerce are represented, respectively, by Edwin C. Reed, secretary of the Esperanto Association of North America; Dr. H. W. Yeamans, vice-president of the American Association, and E. C. Kokeloy. Dr. Yeamans, who was president of the sixth congress, held in Washington last year, opened the convention. One of the features of the first session was the ovation accorded to Dr. Ludwig L. Zamenhof, of Poland, the inventor of Esperanto, when the Spanish consul presented to him on behalf of King Alfonso the Cross of the Order of Isabella.

THE *University of Chicago Magazine* gives some details in regard to the Otho S. A. Sprague Memorial Institute which was organized early in 1911, and is supported by a fund donated by Mr. Otho S. A. Sprague, for many years a resident of Chicago, who died two years ago in California. The donor designated his brother, A. A. Sprague, his own son, A. A. Sprague, 2d, and Messrs. A. C. Bartlett, J. P. Wilson, Charles L. Hutchinson, Byron L. Smith, Martin A. Ryerson, and Dr. Frank Billings as trustees of the fund. The directors have decided upon medical research as the chief object for which the income of the fund shall be expended, and have elected H. Gideon Wells, associate professor of pathology in the University of Chicago and Rush Medical College, to direct the research in medical problems. The work will be done in cooperation with existing institutions, namely, the University of Chicago, Rush Medical College, the Presbyterian Hospital, and the Children's Memorial Hospital of Chicago. The institute will command a definite number of beds in the Presbyterian Hospital for the study of any disease under investigation. An advisory council has been appointed, consisting of Dr. Frank Billings, Professor E. R. Le Count, Professor Ludvig Hektoen, head of the department of pathology and bacteriology, Dr. James B. Herrick, Edwin O. Jordan, professor of bacteriology, Dr. Joseph Miller, and Professor Julius Stieglitz, of the department of chemistry. Dr. Wells has already organized his force of workers, in the laboratories of the University of Chicago and Rush Medical College, and work is already under way. Among those already appointed members of the research staff are Dr. R. T. Woodyatt, Dr. Evarts Graham, Mr. H. J. Corper and Miss Maude Slye. At an early date also several fellowships will be awarded to provide for investigation in various problems concerning human health and disease.

STATISTICS compiled by the U. S. Geological Survey show that the production of spelter or metallic zinc from ore for the first six months of 1911 was 140,196 short tons, a gain of more than 5,000 tons over half the

record output of 1910. Of this production, 5,135 tons were made from foreign ore. Spelter stocks were reduced from 23,232 tons to 17,788 tons. Imports remained about the same but exports were nearly double those of half the preceding year. The apparent consumption of spelter was 135,497 tons, an increase of more than 12,000 tons over the half of 1910 but about the same as in half of 1909. The average price of spelter at St. Louis for the period was 5.36 cents per pound, the London average being .2 cent less per pound. During the latter part of May and the first part of June the average London price was about .1 cent higher than the corresponding St. Louis prices. Under this stimulus the May exports of spelter, zinc ore and dross were largely increased over those of the preceding months.

THE *Electrical World* states that the Danish government, under the direction of its biological department at Copenhagen, has undertaken to aid the fishermen of the Baltic Ocean by preventing the migration of eels from that arm of the sea into the outer ocean. The means employed is a barrier of light, formed by placing fifty electric lights along a submerged cable between the island of Fano and the coast of Funen. The eels migrate only during the dark hours, and, accordingly, as soon as darkness begins in the season of migration the lamps are illuminated and a wall of light is thus interposed which the eels are fearful of passing. A similar plan, using submerged lamps, is said to be a favorite resort of Italian fishermen to keep eels from leaving the shallow waters.

THE account in the July issue of *Man*, by Miss A. C. Breton, of some of the museums of archeology and ethnology in America, will excite among British students of these sciences mingled feelings—admiration at the enterprise and liberality of the American people, and regret that the contrast between the institutions of America and those in England is so clearly to our disadvantage. The museums described in this paper are the New York Natural History Museum, the Brooklyn Institute, the Peabody Museum of

Harvard College, the Yale University Museum, the Philadelphia Academy of Sciences, the National Museum at Washington, and the National Museum of San José, Costa Rica. Practically all these representative collections are provided with suitable buildings and adequate staffs; each has its library, to which access is readily permitted, and arrangements are made by which the officials usually spend part of each year in field work, and are thus in a position to supply to inquirers first-hand information.—*Nature*.

It is stated in *Nature* that the Royal Commissioners for the exhibition of 1851 intend to put into operation at an early date a scheme of industrial bursaries. The scheme is as follows: The commissioners propose to establish a scheme of industrial bursaries for young men who, after a course of training in a university or approved technical college, desire to enter engineering, chemical, or other manufacturing works. The bursaries are intended to enable suitable applicants to tide over the period between their leaving college and obtaining remunerative employment in industry. The value of the bursary will depend on the circumstances of the candidate, but will, as a rule, not exceed £100 a year. A bursar will be elected in the first instance for one year, but the tenure of his bursary will ordinarily be prolonged for a second year provided that the commissioners are satisfied with the work done by the bursar during his first year. In special circumstances a bursary may be renewed for a third year. The appointments to the bursaries will be made by the commissioners from among candidates recommended by the authorities of certain selected universities and technical schools. In dealing with these recommendations, great weight will be given to evidence that a candidate has the practical abilities likely to lead to his advancement in manufacturing work, academic success alone being an insufficient recommendation. The candidate must be a British subject under the age of twenty-five. The candidate must have been a *bona fide* student of science for a term of three years. The candidate must further sat-

isfy the commissioners (a) that he has obtained, or can within one month of election obtain, a post in some engineering or other manufacturing works approved by them; (b) that he is in need of pecuniary assistance to enable him to accept such a post. A bursar may, if the commissioners approve, spend part of the tenure of his bursary in studying a special industrial process or processes in works either at home or abroad. No bursar shall enter a firm as a premium pupil without the special consent of the commissioners. A bursar must submit a report of his work to the commissioners on the expiration of each year of his bursary. Forms of application may be obtained from the secretary to the commissioners.

UNIVERSITY AND EDUCATIONAL NEWS

By act of the New York legislature, approved by Governor Dix, a state college of forestry has been established at Syracuse University, and the sum of \$55,000 has been appropriated for it. It will be remembered that the legislature several years ago refused to continue to support the college of forestry at Cornell University.

GOVERNOR DIX has vetoed the bill to appropriate \$10,000 for establishing a state school of sanitary science and public health at Cornell University.

MR. WILL C. HOGG has stated that he has assurances of a fund of \$25,000 a year for five years for the University of Texas, from which a prize of \$10,000 and other prizes are to be given for the best theses on the scope and purposes of the university.

At West Virginia University E. D. Sanderson, dean of the College of Agriculture, has been appointed director of the Experiment Station to succeed J. H. Stewart, recently resigned, to take effect January 1, 1912, in addition to his duties as dean. Mr. I. S. Cook, Jr., of Chillicothe, Ohio, a graduate of Ohio State University, 1906, has been appointed associate professor of agronomy. William H. Alderman recently associate horticulturalist,

New York Agricultural Experiment Station, Geneva, New York, has been appointed professor of horticulture.

DR. ROBERT RETZER, assistant professor of anatomy in the University of Minnesota, has been elected to a similar position in the University of Chicago.

DR. PAUL J. WHITE, '06, assistant professor of farm crops in the New York State College of Agriculture since 1908, has accepted a professorship in Washington State College at Pullman.

MR. SIDNEY S. SCHMIDT, a graduate of the Missouri School of Mines, and at present a chemist for the Washoe Smelter at Anaconda, Montana, has been appointed assistant in mineralogy at Northwestern University. He will take the place of Mr. A. J. Ellis, who resigned to accept an appointment on the U. S. Geological Survey.

PROFESSOR REICHENBACH, of Bonn, has received a call to succeed Professor von Eschmarch as director of the Hygienic Institute at Göttingen.

DR. GUSTAV STÖRRING, professor of philosophy at Zurich, has been called to Strasburg.

PROFESSOR BETHE, of Strasburg, has accepted a call as professor of physiology at Kiel.

DISCUSSION AND CORRESPONDENCE

COAL NEAR PINEDALE, NAVIJO COUNTY, ARIZ.

IN Mr. A. C. Veatch's recent article on the coal deposits near Pinedale, Navajo County, Ariz.,¹ his first sentence reads: "The suggestion that there were coal deposits in the region near Pinedale, Ariz., first came to the survey through the General Land Office (about November 27, 1909)."

The writer wishes to call attention to the fact that coal was known to exist in this region many years previous to the date above given. In 1903 the writer published an article on the "Geology of the Fort Apache Region,

¹ U. S. Geol. Survey Bulletin No. 431—B. Advanced Chapter from Contributions to Economic Geology, 1909—Coal and Lignite, pp. 154-158.