

out by Dr. George A. Dorsey, of the Field Columbian Museum. W J M.

*THE AMERICAN ASSOCIATION FOR THE
ADVANCEMENT OF SCIENCE.*

THE American Association for the Advancement of Science holds its fifty-first annual meeting at Pittsburgh from June 28 to July 3, and in affiliation with it a number of scientific societies hold their meetings. Announcements in regard to the meetings will be found in the issue of SCIENCE for May 23. Letters in regard to the meeting may be addressed to the permanent secretary, Dr. L. O. Howard, Hotel Schenley, Pittsburgh, Pa., or to the local secretary, Mr. George A. Wardlaw, Post-office Box 78, Station A, Pittsburgh.

SCIENTIFIC NOTES AND NEWS.

DR. WILLIAM H. FORWOOD has succeeded Dr. George M. Sternberg as surgeon-general of the army. His services during and since the Civil War have been distinguished, and he is the author of important contributions to military surgery and of papers on natural science. Dr. Forwood is brigadier-general and senior officer in the medical department of the army. His retirement under the age limit will occur next Saturday.

THE dinner in honor of Surgeon-General George M. Sternberg, to which we have called attention, occurred in New York on June 13. Addresses were made by Dr. E. G. Janeway, Dr. A. H. Smith, Colonel Henry Lippincott, Dr. William Osler, Major W. C. Gorgas, Dr. John A. Wyeth, Dr. Frank Billings and Dr. W. H. Welch. Dr. Sternberg also spoke.

AT its recent commencement exercises Princeton University conferred the degree of LL.D. on Dr. H. F. Osborn, professor of zoology at Columbia University.

PRESIDENT HENRY SMITH PRITCHETT, of the Massachusetts Institute of Technology, gave the convocation address at the University of Chicago on June 15.

DR. J. WALTER FEWKES, of the Bureau of American Ethnology, has just returned from a successful ethnologic and archeologic reconnaissance of Porto Rico.

DR. FRANK RUSSELL has brought to a close a year's work in Arizona under the auspices of the Bureau of American Ethnology. Some months were spent in archeologic reconnaissances and surveys; since January he has been occupied with studies of the sociology and mythology of the Pima Indians at Sacaton and elsewhere. Dr. Russell will resume his work in Harvard during the autumn.

DR. ALBERT E. JENKS, ethnologist in the Bureau of American Ethnology, sailed from San Francisco on the 15th instant for Manila, pursuant to a transfer of a year to the Philippine service. He will be associated with Dr. David P. Barrows, chief of the Philippine Bureau of Non-Christian Tribes.

ASSISTANT PROFESSOR OSCAR QUICK, of the Department of Physics, University of Illinois, Urbana, Illinois, has resigned his position to go into practical electrical engineering work.

THE Pathological Institute of the University of Prague will celebrate next year the twentieth anniversary of the directorship of Professor Hlava. A commemorative volume is in preparation.

MR. E. CUNNINGHAM, St. Johns College, is this year senior wrangler at Cambridge.

THE Paris Academy of Sciences has sent M. Lacroix, of the Museum of Natural History; M. Rollet de Lisle, the engineer, and M. Giraud, the geologist, to investigate the effects of the volcanic eruption in the Lesser Antilles. They embarked on June 9, and will spend several months on the islands.

THE Loubat prize for 1902 has been awarded by the Swedish Royal Academy of Literature, History and Antiquity to Mr. C. V. Hartman for his publications concerning his archeological and ethnological researches in San Salvador and Costa Rica.

IN honor of the late Alpheus Hyatt a memorial fund is being collected for field lessons in natural history. Professor Hyatt was greatly interested in extending the teaching of natural history to the schools and this memorial appears to be especially appropriate. While the fund will be administered by a board of trustees at Boston contributions from Professor Hyatt's former pupils or friends, wherever

living, will be welcome. The president of the trustees is Professor William H. Niles, of the Massachusetts Institute of Technology, and the treasurer, to whom subscriptions may be sent, is Mr. Stephen H. Williams, 2 Tremont street, Boston, Massachusetts.

DR. WYETH JOHNSON, recently appointed professor of hygiene at McGill University and dean of the Medical School, died at Montreal, on June 19.

DR. RICHARD BURTON ROWE, of the U. S. Geological Survey, died of consumption in the hospital at Los Angeles, Cal., on May 26, at the age of thirty years. Dr. Rowe was a graduate of Union College and Johns Hopkins University. His home was at Clarksville, Albany County, N. Y.

MAJOR OSCAR CHAPLIN FOX, since 1873 examiner in the U. S. Patent Office, and a fellow of the American Association for the Advancement of Science, died on June 7, at the age of seventy-two years.

THE Rev. Doctor Anson Judd Upson, chancellor of the University of the State of New York, died on June 15, in his seventy-ninth year.

CONGRESS has just made an additional appropriation of \$75,000 for the buildings of the National Bureau of Standards. The cost of the buildings as now planned is \$325,000.

HERR BECK-GAMPER has given 750,000 francs to the Zoological Garden at Basel.

THE Duc de Chartres, in memory of his son, Prince Henry, has given the Paris Geographical Society 11,000 francs, the interest of which shall be given every three years for a journey for economic study and geographical exploration in Asia.

M. HENRI SCHNEIDER gave before his death \$7,000 to the French Society of Civil Engineers for seven prizes to be awarded for the best books in different departments of engineering published in France during the last forty years. The books entered for competition must be received by the society not later than the end of the present month.

THE bill transferring certain forest reserves to the Department of Agriculture has been defeated in the House by a vote of 100 to 70.

ATTORNEY-GENERAL DAVIES has decided that the Cornell School of Forestry has not violated any provisions of law on the land held by it in the Adirondack preserve, and he has made public an opinion in which he holds that there exists no cause for the beginning of an action to dispossess Cornell University from lands which the college holds for forestry purposes.

THE annual *conversazione* of the Institution of Civil Engineers was held on June 4. Mr. Charles Hawksley (president), and Mrs. Hawksley, supported by Sir John Wolfe-Barry, Sir Benjamin Baker, Sir Frederick Bramwell, Sir William Preece, Sir Douglas Fox, Sir Alexander Binnie, and Sir G. Molesworth (members of the council) received about 1,500 guests.

W. S. CHAMP, secretary of the Baldwin-Ziegler Arctic expedition, and Dr. G. Shurkley, of New York, started on June 13 for Tromsø, Norway, whence they will sail on July 1 on the *Frithjof* for Franz Josef Land to take coal to Mr. Baldwin's ship, the *America*, and obtain news of the explorer. Mr. Champ expects to find the *America* in about 82 degrees. If Mr. Baldwin has succeeded in his dash to the pole he will be brought back. Otherwise the *Frithjof* will leave a well equipped sledge party to search for Mr. Baldwin. The *Frithjof* will return on October 1 at the latest.

PROFESSORS R. A. S. REDMAYNE and T. Turner, who hold respectively the chairs of mining and metallurgy in the University of Birmingham, are at present in America investigating our technological schools with a view to the arrangement of their departments at Birmingham. In the Montreal daily *Star*, a copy of which a correspondent has sent us, Professor Redmayne is quoted as saying: "In no part of England, nor anywhere on the continent, in fact, can you find a school of mining or a department of metallurgy in any university that can in any way compare with those to be found in Canadian and American universities. Strange to say, these departments in the universities of the old country are so incomplete that up to the present it has been found necessary, if one

wanted to obtain a thorough technical training, to come to America. To change the present condition of affairs in England is the object of our present visit."

At a meeting of the Zoological Society of London on June 3 Mr. William Sclater made some remarks on the present condition and future prospects of the zoological museums of South Africa, altogether eight in number, most of which he had recently visited.

THE city of Waukesha, Wisconsin, as a result of a condition of a recent election, has purchased the Cutler property in that city for use as a library and park site to enclose and preserve the three prehistoric mounds situated thereon. The efforts of the Wisconsin Natural History Society were largely instrumental in bringing about this result.

THE Canadian Electrical Association held its twelfth annual convention at Quebec on June 11, 13 and 14.

AN International Navigation Congress will be held at Düsseldorf from June 29 to July 5.

THE American Roentgen Ray Society will hold its next meeting in Chicago on December 10 and 11, under the presidency of Dr. G. P. Girdwood, of Montreal.

THE program for the Section of Science at the approaching meeting of the National Educational Association is:

'President's Address': W. H. NORTON, Professor of Geology, Cornell College, Iowa.

'The Educational Value of Museums': OLIVER C. FARRINGTON, Field Columbian Museum, Chicago.

'The Projection Microscope; its Possibilities and Value in Teaching Biology': Professor A. H. COLE, Lake High School, Chicago.

'The International Geographical Congress to be held in Washington under the Auspices of the National Geographic Society, 1904': GILBERT H. GROSVENOR, Managing Editor *National Geographic Magazine*, Washington.

'Laboratory Courses in Physics': FRANK M. GILLEY, High School, Chelsea, Mass.

'The Value of Physiography in the High School': Professor J. A. MERRILL, State Normal School, West Superior, Wisconsin.

'Federal Facilities for Education': Dr. W J

McGEE, Ethnologist in charge Bureau of American Ethnology, Washington.

WE announced last week a civil service examination to fill twelve vacancies in the position of aid in the U. S. Coast and Geodetic Survey. We have received a copy of a letter by Mr. O. H. Tittmann, superintendent of the Survey, containing the following further explanation: The rank of aid is the lowest or entering rank leading to the position of assistant to the superintendent. The Coast and Geodetic Survey is engaged in a great variety of duties and its operations extend over a vast range of territory. The aids, like the assistants, are subject to assignment either as chiefs of party or subordinate officers on parties engaged in the determination of the magnetic elements, in secondary triangulation and astronomical determinations for the control of topographic and hydrographic surveys, in primary triangulation and the corresponding astronomical determinations, in topographic surveying along the coast and in hydrographic surveys in the bays or harbors and in the open sea. The steamers and sailing vessels belonging to the Survey are commanded by these members of the permanent field force. During the intervals between field seasons assistants and aids are subject to assignment to office duty in Washington, or in one of the sub-offices at Seattle, San Francisco, Honolulu or Manila. Nearly all administrative positions in the office at Washington, from that of chief of division to the highest rank, are open to and are now filled by assistants. The duties of the field officers take them to all parts of the United States, including Porto Rico, Alaska, Hawaii and the Philippines. The members of the permanent field force have, therefore, a very wide range of duties as surveyors engaged in the highest grades of surveying, as navigators and as scientists, and have a rare opportunity for extensive travel and acquaintance with the world. The aid is subject to assignment to any duty required of any other officer of the permanent field force. In general the exigencies of the service place the aids so promptly in responsible positions that there is an abundant opportunity

for a man of exceptional ability to become known. Aids are appointed at a salary of \$720 per year. The next step in the line of promotion is to the salary of \$900 as aid, and thence to assistant at \$1,200, and then upward by steps of \$200 each. These statements of salary are misleading unless taken in connection with the fact that necessary traveling expenses incurred in the line of duty are paid by the government, and that in addition to his salary he is paid an allowance for subsistence to cover the ordinary living expenses while on field duty. During this period the allowance for subsistence is from \$1.00 a day for an officer living on shipboard or in camp in quarters furnished by the government, to \$2.50 a day for a chief of party living at a hotel or other quarters not furnished by the Government. All appointments to the position of aid are made from a Civil Service examination.

The Sixth Annual Report of the New York Zoological Society is most creditable to the Society in general and the director in particular. It not only shows very rapid progress in the laying out of the grounds and the erection of new buildings, but progress in the care of animals and in the control of disease among them; this in spite of the loss of several anthropoid apes. The death of these animals was found to be caused by an infusorian, *Balantidium coli*, introduced with the Galapagos tortoises, and harmless to them, while fatal to the large apes. The diseases of the animals are discussed at length in the reports of the veterinarian and pathologist, and the statement is made that little loss has been caused by tuberculosis, although this usually causes a large proportion of the deaths among animals in captivity. Mr. Dittmars gives an interesting account of the giant tortoises from the Galapagos, Mr. Beebe describes the 'Success of the Indoor Flying Cage,' Madison Grant tells of 'The Society's Expedition to Alaska,' and Mr. Loring presents some 'Notes on the Destruction of Animal Life in Alaska,' and gives an annotated list of 'Mammals and Birds observed in Southern Alaska in 1901.' The report is well illustra-

ted and contains articles both of scientific value and of interest to the general reader.

As a result of a series of experiments begun at Clemson College in 1901 and brought to a successful completion in the laboratories of the New York Botanical Garden Dr. Alex. P. Anderson has developed a method by which, with the application of heat to starch grains and to air-dry starch in many forms, the granules or particles are expanded to many times their original dimensions, being fractured into innumerable fragments during the process. As a result of this treatment a grain of rice is expanded to eight or more times its original volume, while still retaining its original form. Other cereals exhibit similar behavior. The process is applicable to nearly all starchy seeds and starchy substances, greatly increasing their nutritive availability. The products obtained are pleasant to the taste, and the process may be varied to produce a great variety of flavors with any given cereal. Furthermore the material prepared in this manner is absolutely sterilized and may be preserved or stored for long periods. The approval the products have met from food and chemical experts suggests that the process may prove of great economic and commercial value.

THE *London Times* states that a London auctioneer has sold a collection of birds' eggs, among which was included the final portion of the collection of the late Mr. Philip Crowley, and also a collection from the cabinets of Mr. H. Noble. The most important lot in the sale was probably the finest known egg of the extinct moa, from New Zealand, which, however, did not reach the reserve price at £200. The last egg of this bird was offered at Stevens' about 20 years ago, and this was bought in at 200 guineas; it was returned to New Zealand, but eventually passed into the possession of an English collector at about 250 guineas. An egg of the *kyornis maximus*, the largest specimen ever offered, realized 38 guineas, and two eggs of the pectoral sandpiper, one from Alaska, £8 18s. 6d. These are the only eggs of this bird ever offered for sale in England. Four exceptionally large eggs of the golden eagle varied from 55s. to 75s. each.