

SCIENTIFIC NOTES AND NEWS.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

THE spring meeting of the Council of the American Association for the Advancement of Science was held April 18, in Washington, D. C.

The Permanent Secretary, Dr. L. O. Howard, presented for the information of the Council an account of the operations of his office since the last Council meeting. He also presented his financial statement for the last half of the year 1898, which was approved and ordered to be printed. He announced that a contract had been signed which provided for the printing of the Volume of the Proceedings of the Association for 1899 by the Chemical Publishing Company of Easton, Pa.

A number of matters relating to the Columbus meeting the coming August were discussed. The Council expressed its preference in favor of Saturday, August 26th, as the day upon which the all-day excursion should be given, and further, in order that the scientific sessions should not be interrupted, passed a resolution expressing its desire that afternoon excursions and other social functions should not be arranged by the Local Committee to begin before 4 o'clock in the afternoon. It was decided to hold the final public meeting of the Association on Friday night and the meeting of the Nominating Committee on Thursday night. Inasmuch as some dissatisfaction had been expressed with the plan adopted at the Boston meeting of doing away with the general morning sessions, it was decided to resume these daily sessions at 10 o'clock each morning, confining the business, however, to a consideration of matters emanating from the Council and limiting their duration to half an hour.

The Permanent Secretary was authorized to invite Mr. Elihu Thomson to deliver the public lecture at the Columbus meeting.

The Chairman of the Committee on Association Badge reported progress and submitted designs.

An application from Professor C. B. Davenport, of the Museum of Comparative Zoology, Cambridge, Mass., for an appropriation from the Research Fund of \$50 to enable Mr. Charles C. Adams to visit the headwaters of the Ten-

nessee River to collect shells for the genus *Io* for the purpose of a specific study of variation was referred to the Committee on Grants, with power to act.

GEOLOGICAL SURVEY WORK IN ALASKA.

THE Secretary of the Interior has approved plans submitted by Director Walcott, of the Geological Survey, for the continuation of surveys in Alaska during the summer of 1899. It is proposed that one party, to consist of Mr. W. J. Peters, topographer in charge, and Mr. Alfred H. Brooks, assistant geologist, and equipped with pack animals and outfit, shall proceed from Chilkat Inlet, along the northern side of St. Elias Range, to the head of White River, and conduct such explorations as may be feasible to locate the sources of the Copper, Tanana and Nabesna Rivers. Between the Tanana and the Yukon there is a range of mountains composed largely of the gold-bearing schists. Although quite extensively prospected, but little is known of this range. The explorations will be by the most feasible route to Eagle City and thence westward within the area between the Tanana and the Yukon. It is expected that the party will reach a point on the Yukon in September, and return by the way of St. Michael or, if more advantageous, by way of Dawson.

The second party, consisting of Mr. F. C. Schrader, assistant geologist, and a topographer, will proceed down the Yukon to Fort Yukon, and from there carry forward explorations northward toward the Koyukuk. The object of this party is to explore the principal waters of the Koyukuk within the Arctic Circle. As the region is almost unknown, the special route to be traversed will be left to the discretion of the head of the party. The equipment of the party is to consist of canoes of the same type as those used in the explorations during the field season of 1898. It is expected that the party will return down the Koyukuk to the Yukon and out by the way of St. Michael.

The plans have been developed as a result of thorough discussion by the members of the Survey familiar with explorations in Alaska and the resources of the Territory.

W. F. M.

SCIENTIFIC POSITIONS UNDER THE GOVERNMENT.

A CIVIL service examination will be held on May 9th to establish an eligible register for the position of Expert in Terrestrial Magnetism, U. S. Coast and Geodetic Survey, Department of the Treasury, at a salary of \$2,500. The examination will consist of the subjects mentioned below, which will be weighted as follows: (1) experience in conducting magnetic surveys, including a knowledge of the literature, past and present, of the subject, 30; (2) original investigations and training connected with the study of magnetism, 40; (3) practical questions relative to terrestrial magnetism, 30.

An examination will be held in June for the position of Inspector of Standards, Office Standard Weights and Measures, U. S. Coast and Geodetic Survey, Department of the Treasury, at a salary of \$3,000 per annum. Competitors will not be required to be present at an examination, but a decision will be made on the result of the following tests: (1) training and experience, comprising, especially, original investigations in physics, 30; (2) published papers having special reference to investigations in physics or pertaining to standards of weight and measure, 30; (3) thesis of not less than two thousand (2,000) nor more than four thousand (4,000) words, on the proper functions of a national office of weights and measures, 40.

On May 16th an examination will be held for the position of Field Assistant, Division of Forestry, Department of Agriculture, with a salary of \$1,000 a year. The subjects and weights are as follows: (1) Forestry, 60; (2) Botany, 10; (3) English (essay), 10; (4) Education and Experience, 20.

In view of the scarcity of applicants the examination scheduled to be held on April 11-12, 1899, for Examiner of Surveys, General Land Office, Department of the Interior, has been postponed to May 9-10, 1899. The examination is chiefly on land surveying and the salary is \$5 per day.

GENERAL.

THE National Academy of Sciences at its meeting last week elected the following new members: Charles E. Beecher, professor of historical geology at Yale University; George

C. Comstock, professor of astronomy in the University of Wisconsin; Theodore W. Richards, professor of chemistry in Harvard University; Edgar F. Smith, professor of chemistry in the University of Pennsylvania, and E. B. Wilson, professor of zoology in Columbia University.

DR. DAVID GILL, of the Royal Observatory, Cape of Good Hope, has been awarded the Watson medal of the National Academy of Sciences.

MR. I. H. BURKILL has been appointed assistant to the Director of Kew Gardens.

DR. CHARLOTTE ANGUS SCOTT, professor of mathematics at Bryn Mawr College, has been elected an honorary member of the Amsterdam Mathematical Society.

MR. G. L. TELLER, whose recent work on the Chemistry of Wheat at the Arkansas Agricultural Experiment Station has attracted attention, has resigned his position as chemist of that Station for the purpose of taking charge of chemical work in the Chidlow Institute of Milling and Baking Technology, Chicago. This Institute, recently founded by Mr. David Chidlow, who has been for some time past chemist to the Pillsbury-Washburn Flour Mills Co., of Minneapolis, is the only institution in America which offers the advantages of technical instruction to millers and bakers.

DR. HEINRICH KIEPERT, since 1859 professor of geography in the University of Berlin, well known for his explorations in Asia Minor and important publications, died on April 21st in his 80th year.

CHARLES H. SWAN, a well-known civil and sanitary engineer, died in Roxbury, Mass., on April 17th.

MR. SPENCER H. DEVARRE, formerly instructor in mathematics in Yale University, has died at Brooklyn.

WE learn from *Nature* that the Easter dredging expedition of the Liverpool Marine Biology Committee was brought to an untimely end by an unfortunate boat accident in Port Erin Bay. On March 31st dredging and trawling were carried on from the fisheries steamer *John Fell*, and on the following forenoon the Tanner closing net and the method of pumping plankton

from the bottom by means of a hose-pipe were tried on the steamer. On the afternoon of Saturday, April 1st, two of the workers in the Biological Station went out to collect surface plankton in a small boat. While hauling in the tow-net when returning, the boat capsized, and both were thrown into the water. One of them (Mr. E. J. W. Harvey, of Liverpool) was picked up by another boat from the Biological Station, but his companion (Mr. Eric T. Townsend, of Manchester) was unfortunately drowned before assistance could reach him. The body was eventually recovered. Mr. Townsend was a student at the Owens College, and was occupying the College work-table at the Port Erin Biological Station.

DR. L. BUSCALIONI is making collections in Brazil for the Botanical Museum at Rome.

THE French government is sending an expedition to the Congo to make a topographical survey of the colony.

M. ADRIEN DE GERLACH, the chief of the Belgian Antarctic expedition, will return with the *Belgica* without further explorations after repairs have been made at Buenos Ayres. M. Artowski, the naturalist of the expedition is already on his way home. Lieutenant Danco, who had charge of the magnetic observations, died in June, 1898.

A RUSSO-SWEDISH scientific expedition will start for the Spitzbergen Archipelago in May. The Russians will be represented by Staff Captain Sergiebsky, the zoologist Vinitsky, Dr. Bunge and the geologist and mining engineer Chernysheff. They will go in the Libau ice-breaker No. 2, and the Bakan, and join the Swedish party at Stockholm. The expedition intends to winter in Spitzbergen, the Russians at Edge Island and the Swedes at Parry Island.

As we have already stated, the next annual meeting of the British Association will be held at Dover under the presidency of Professor Michael Foster, commencing on Wednesday, September 13th. For the benefit of Americans who may propose attending the meeting, it may be added that notice of papers proposed to be read should be sent before July 1st to the Assistant General Secretary, Mr. G.

Griffith, at the office of the Association, Burlington House, London.

AN electrical exposition will be held in Madison Square Garden, New York, during the month of May.

THE King of the Belgians, as Sovereign of the Congo Free State, has contributed £200 toward the establishment of the London School of Tropical Medicine, and the Secretary of State for India has subscribed £1,000. The Archbishop of Canterbury has also contributed £50 to the same object. Lord Lister, President of the Royal Society, was the principal guest on the occasion of the inaugural dinner in connection with the Liverpool School for the Study of Tropical Diseases on the 22d inst. A sum of £1,700 has been promised towards the expenses of the Liverpool School.

THE Kansas State Legislature has appropriated \$25,000 for a dairy building at the Agricultural Experiment Station and \$6,000 for its equipment. The Oklahoma Legislature has appropriated \$30,000 for buildings and equipment for its Agricultural Station.

It is said that the estate left by the late Baroness de Hirsch has been valued at \$125,000,000, of which \$100,000,000 will be expended in carrying out the various charities founded or fostered by the Baron and Baroness. The Hirsch Foundation in New York City receives \$1,200,000.

MR. ANDREW CARNEGIE has increased his donation for the Washington Free Library from \$250,000 to \$300,000, in order that the building may be of more artistic construction.

WE learn from *The Auk* that the Philadelphia Academy of Natural Sciences has acquired the collection of bird skins made by Mr. Joseph Hoopes, of West Chester, Pa. It contains more than 7,000 specimens, nearly all being North American land birds.

THE following are the lecture arrangements after Easter at the Royal Institution: Professor J. Cossar Ewart, three lectures on zebras and zebra hybrids; Professor Silvanus P. Thompson, two lectures on electric eddy-currents (the Tyndall Lectures); Professor W. J. Sollas, three lectures on geology; Professor

Dewar, three lectures on the atmosphere; Mr. Lewis F. Day, three lectures on embroidery; Professor L. C. Miall, two lectures on water weeds; Mr. Louis Dyer, three lectures on Machiavelli; Mr. W. L. Brown, two lectures on 'To Iceland in Search of Health'; Mr. Edgar F. Jacques, three lectures on 'The Music of India and the East, and its Influence on the Music of Europe' (with musical illustrations). The Friday evening meetings will be resumed on April 14th, when a discourse will be delivered by Professor A. W. Rücker on 'Earth Currents and Electric Traction.' Succeeding discourses will probably be given by Dr. F. W. Mott, Professor C. A. Carus Wilson, Dr. W. J. Russell, Professor T. Preston, the Bishop of Bristol, Sir William Martin Conway, Mr. H. G. Wells and others.

THE Belgian Royal Academy, according to *Nature*, proposes the following subjects for essays in competition for gold medals of value 600 francs each, to be awarded in 1900. The essays are to be sent to the Secretary before August 1, 1900, each bearing a motto, and written in French or Flemish. Contrary to the usual custom, five subjects instead of three have been selected in each of the two departments of mathematical and physical science and of natural science. The mathematical and physical questions refer to: (1) critical phenomena in physics; (2) viscosity of liquids; (3) the carbon derivatives of an element whose combinations are little known; (4) the history and theory of variation of latitude; (5) the algebra and geometry of n -linear forms where $n > 3$. The questions in natural science refer to: (1) the geological formations at Comblain au Pont, and whether these are Devonian or Carboniferous; (2) the physical modifications produced in minerals by pressure; (3) the organization and development of the platoda; (4) the presence of a nucleus in the Schizophyta; (5) the Devonian flora of Belgium.

UNIVERSITY AND EDUCATIONAL NEWS.

ASSISTANTS IN PHYSIOLOGY IN HARVARD MEDICAL SCHOOL.

Two of the four positions offered by the Harvard Medical School to properly qualified men desirous of training in physiological research

and in the management of large laboratory classes in experimental physiology are not yet filled for the next collegiate year. Holders of these positions give more than half the day to research. The remaining time is spent during the first four months in learning laboratory methods and during the last four months in directing the laboratory work of the medical students, two hundred of whom work from two to three hours daily for sixteen weeks in experimental physiology. The fundamental experiments in physiology done by two hundred men working at one time present every variety of results and impart a training in observation and administration not to be acquired in other ways.

Much too may be learned by association; from six to ten men are constantly engaged in research in the laboratory of physiology, and in the departments of anatomy, histology, pathology, physiology and physiological chemistry, all of which have their laboratories in the medical school building, are more than thirty instructors. No charge of any kind is made, either for the training in physiological research and in teaching or for the use of animals and other material. Four of the eight investigations already made by holders of these positions have appeared in the *American Journal of Physiology*, and the others will be published shortly.

In addition to these opportunities the school gives each assistant four hundred dollars for superintending the class work in experimental physiology three hours daily during sixteen weeks.

Applications for these positions should be made to Dr. H. P. Bowditch, Harvard Medical School, 688 Boylston Street, Boston, Mass.

GENERAL.

THE following gifts and bequests to educational institutions have been made since our last issue: \$50,000 to Oberlin College for a chemical laboratory; \$8,000 to Vassar College by the will of Mrs. Luther Elthing for the founding of a scholarship; \$6,000 from Miss Emily H. Bourne for the establishment of scholarships in Barnard College; \$10,000 to the Catholic University of Washington by the will of Miss Mary Moran, and a conditional gift of