Mr. Jas. F. Callbreath, Jr., editor of the *Mining Reporter*, was appointed chairman of the committee on printing and will at once proceed to publish the Preliminary Announcement, which will be distributed to all members of the Association.

The permanent secretary has as yet been unable to secure definite information regarding the railroad rates. This is the first time the Association has met in the far West and all the passenger associations are holding their decisions contingent upon that of the Western Passenger Association, in whose territory the meeting is to be held. This association is not in the habit of taking definite action on meetings of this character until within 60 days of the meeting, and this has complicated the railroad question. The peculiar character of the Association, in that it is composed so largely of men connected with college faculties, who have a long summer vacation and desire to make their plans well in advance, and, in fact, the majority of whom leave home after commencement and are difficult to reach by mail, has been shown to the railroad people and a speedy decision is hoped for. The permanent secretary thinks it most probable that a rate of not to exceed one fare plus \$2 will be secured for the territory west of Chicago, and surely the passenger associations east of Chicago will make a rate at least as low as one fare and one-third. An effort is still being made to secure a one fare rate for the entire trip.

SCIENTIFIC NOTES AND NEWS.

Professor William James, of Harvard University, began his course of Gifford Lectures at Edinburgh on May 16th.

THE Paris Academy of Sciences has elected Dr. Zeuner, of Dresden, a correspondent in the section of mechanics. The other nominations were: Professor Henry T. Eddy, University of Minnesota and Professor Zabonsdsky, of St. Petersburg. In the section of geography and navigation, Dr. Oudemans, of Utrecht, was elected correspondent. The other nominations were: Mr. Wharton, of London, Professor Albrecht, of Potsdam, and Professor Neumayer of Hamburg.

THE following have been elected honorary

members of the American Chemical Society: Professor William Ramsay, University College, London, Sir Henry E. Roscoe, University of London, Professor Emil Fischer, University of Berlin, Professor Adolph Baeyer, University of Munich, and Professor George Lunge, University of Zurich.

SIR WILLIAM MACCORMAC, president of the Royal College of Surgeons, London, has been elected a foreign associate fellow of the College of Physicians of Philadelphia.

MR. WILLIAM WHITWELL has been elected president of the British Iron and Steel Institute in succession to Sir William Roberts-Austen.

Mr. W. Langdon has been nominated for the presidency of the Institution of Electrical Engineers, London.

THE Linnean Society, London, has awarded its gold medal to Lieutenant Colonel Sir George King, the botanist, lately superintendent of the Royal Botanic Garden at Calcutta. He has published important monographs on the flora of India, China and the Malay Peninsula.

THE Bessemer Gold Medal of the British Iron and Steel Institute has been conferred upon Mr. John Edward Stead, F.I.C., in recognition of the value of his investigations of the physical and chemical properties of iron and steel.

Dr. G. T. MOORE, of the department of biology at Dartmouth College, has been appointed algologist in the Department of Agriculture.

Nature states that news has been received of the safety of Professor W. Baldwin Spencer and Mr. Gillen. They report themselves in good health and already busy taking phonoand kinematographic records. The Postmaster-General of South Australia has provided them with pocket apparatus for tapping the overland telegraph line when in the vicinity of their route.

THE president of the University of Tokyo, Deiroku Kikuchi, will represent Japan at the bi-centennial celebration of Yale University next October.

KING EDWARD VII. has consented to be patron of the British Medical Association.

A DEPARTMENT of experimental psychology has been established in connection with the Pathological Laboratory of the London County Council Asylums at Claybury. Dr. W. G. Smith, recently of Smith College, Northampton, has been placed in charge.

DR. OTTO LUGGER, State entomologist of Minnesota, died of pneumonia on May 21st. Dr. Lugger was an entomologist of wide reputation. He was assistant to the late Professor C. V. Riley at the time when the latter was publishing his well-known 'Reports on the Insects of Missouri.' Subsequently he became curator of the Maryland Academy of Sciences and, still later, an assistant in the Division of Entomology, U. S. Department of Agriculture, from which place he went to Minnesota as State entomologist in 1887. The latter office he has held for nearly 14 years with great success. His reports have been models of their kind and his investigations along certain lines have been of great value to agriculture.

DR. WILLIAM D. THOMAS, professor of psychology in Richmond College, Va., died on May 22d.

The death is announced of Dr. E. Bretenschneider at St. Petersburg. He was for many years physician to the Russian Legation at Pekin, and made important researches on Chinese archeology, geology, etc. His books include two on Chinese botanical work.

THE death is also announced of Dr. Peter Helmling, formerly professor of mathematics at the University of Dorpat, at the age of eighty-four years, and of Dr. George Asp, professor of anatomy at Helsingfors.

The officers of Section C, Chemistry, of the American Association have issued the following preliminary announcement:

The 50th annual meeting of the American Association for the Advancement of Science will be held in Denver, Colorado, August 24-31, 1901. The meetings of Section C will be held as heretofore in connection with the meetings of the American Chemical Society. The officers of the Section ask the cooperation of all the members in making the meeting a successful one. To this end you are personally requested to present one or more papers. Will you kindly fill out and return the enclosed blank giving us informa-

tion as to whether you expect to attend the meeting; also the titles of any papers which you will present. According to the constitution, such abstracts of the contents of the papers as will give a general idea of their nature must be sent to the Secretary of the Section as early as possible. If you cannot present the abstract at this date, kindly send the title of the paper and furnish the abstract later. It is hoped to have reviews of the recent progress made in the various fields of chemistry. The presentation of such reviews by any of the members will be greatly appreciated. The officers of the Section will also appreciate any suggestions in reference to the program.

WILLIAM McPherson, Secretary of Section C.

OHIO STATE UNIVERSITY, COLUMBUS, O.

THE American Microscopical Society will meet at Denver, in conjunction with the American Association for the Advancement of Science, on August 20, 30 and 31. The Secretary, Professor Henry B. Ward, of the University of Nebraska, promises that the meeting will be the best and most enjoyable yet held.

THE Council and Board of Directors of the American Chemical Society have authorized the expenditure of \$500 for the publication in a separate volume of the proceedings of the twenty-fifth anniversary meeting of the Society, held last month.

In addition to the civil service examinations that we have already announced for June 3d, there will be two others: that of secretary of the National Bureau of Standards, with a salary of \$2,000, and that of field assistant in treeplanting in the Division of Forestry, with a salary of \$1,000. On June 18th examinations will be held as follows: assistant ethnologist in the Bureau of Ethnology, at a salary of \$1,200; zoological clerk in the Bureau of Animal Industry, at a salary of \$840; a botanical clerk and assistant in the Department of Agriculture, at a salary of \$1,000, and a special statistical compiler, Department of Agriculture, at a salary of \$720. Those desiring further information concerning these positions should apply to the Civil Service Commission, Washington, D. C.

Two buildings for the Pacific Botanical Station, which is being established by the botanists

of the University of Minnesota, are in process of erection at a cost of about \$2,500. The British Columbian Parliament has passed a grant for the construction of a road between the Port Renfrew dock and the Station site on the Straits of Juan de Fuca. A party of thirty or forty western botanists will leave Minneapolis under the direction of Professor Conway MacMillan and will spend the latter part of June and the first two or three weeks in July in the study of marine vegetation at the new seaside station, and of mountain vegetation at Banff, Alberta, and Field and Glacier, British Columbia. A subordinate party proposes to explore some of the little-known mountains of northern Vancouver.

WE learn from the *Botanical Gazette* that the valuable herbarium of the late Professor Agardh has been secured by the University of Lund.

Mr. L. COCKAYNE, of Tarata, New Zealand, has recently presented to the New York Botanical Garden a large number of seeds of plants indigenous to the island, and has also donated nearly a hundred fine photographs, showing distinctive features of the vegetation of that island and also of Chatham Island, which he has explored within the last year.

The collection of Indian relics and prehistoric anthropological specimens collected by Andrew E. Douglass has been presented to the American Museum of Natural History, New York. It contains about 23,000 specimens which were selected with great care.

The collection of butterflies of the American Museum was opened to the public on May 24th. There are about 5,000 specimens, including the valuable collection given some time since to the Museum by the Rev. E. A. Hoffman.

The library and collections of the late Dr. Jared P. Kirtland have been placed in the custody of Adelbert College by his granddaughter, Mrs. Caroline P. Cutter. Dr. Kirtland was a pioneer naturalist of the Western Reserve, the founder of the Kirtland Academy of Natural Science, and a man of wide attainments. His library contains about 2,200 volumes and embraces a wide field, including zoology, botany, geology, horticulture, travel, exploration, biography and local history. It is particularly rich

in general and descriptive zoology of the mollusks, insects and fishes.

Mr. Schuyler S. Wheeler presented to the Institute of Electrical Engineers, New York City, at its meeting on May 21st, the extensive and valuable library of electrical works collected by the late Latimer Clark, of London.

AT the monthly meeting of the Royal Meteorological Society on May 15th, Mr. W. Marriott gave an account of the bequest by the late Mr. G. J. Symons to the Society. By his will Mr. Symons bequeathed to the Society his Cross of the Legion of Honour, the Gold Albert medal awarded to him by the Society of Arts, the testimonial album presented to him in 1879 by the Fellows of the Royal Meteorological Society, and the sum of £200, as well as such of his books, pamphlets, maps and photographs of which there was no copy in the Society's library. Mr. Marriott stated that from Mr. Symons's valuable collection he had selected for the society over 5,000 books and pamphlets and about 900 photographs. A large number of the books were old and rare works, 750 bearing dates previous to 1800, while eight were as early as the 15th century. By this bequest the Royal Meteorological Society is said now to possess the most complete meteorological library in existence.

Mr. Carnegie has given £100,000 for branch libraries for the city of Glasgow.

The current issue of *Nature* contains the following further information and comments concerning the resignation of Professor J. W. Gregory from the leadership of the scientific staff of the antarctic expedition:

The great majority of scientific men in the country were confident that Professor Gregory possessed unique qualifications for the post of scientific leader of an expedition in which many branches of science required study and coordination. Under his direction, and with a competent naval head who should have an absolute veto upon all operations which involved risk to ship and crew, great scientific results were assured.

The opposition of the representatives of the Royal Geographical Society, which had obtained most of the funds voluntarily subscribed, and of a few scientific men belonging to the Navy, rendered it impossible that these full powers could be granted; but a compromise acceptable to Professor Gregory was passed

by a large majority (16 to 6) of the Joint Antarctic Committee, including the officers of both societies and almost every expert on their joint lists.

The compromise provided, in the words submitted on February 12th to the joint committee, 'that a landing party, if possible, be placed on shore, under the charge of the director of the civilian scientific staff.' Professor Gregory was informed of this, accepted it, and the next day sailed for Melbourne.

The Royal Geographical Society's council refused to accept the compromise, and deputed three of their number to suggest to the officers of the Royal Society that the matter should be settled by a new committee of six, three to be appointed by each council. The Royal Society consented; the committee, chiefly composed of non-experts, met, and proposed modifications which Professor Gregory has been unable to accept.

We shall await with some interest to see whether the majority of Fellows of the Royal Society, and of other scientific men in this country, will approve the manner in which the Royal Society has acted as the guardian of scientific interests.

A CALL has been issued for the formation of an international botanical association, the first meeting of which will be held at Geneva on August 7th. One object of the association is the establishment of a bibliographic periodical, giving abstracts in English, German and French. An option for the purchase of the Botanisches Centralblatt has been secured. The Americans signing the call are Professor W. G. Farlow and Dr. David D. Fairchild, and the secretary is Dr. J. P. Lotsy, Wageningen, Holland.

THE eighty-fourth annual meeting of the Swiss Scientific Society will be held at Zofingen on the 4th, 5th and 6th of August. In conjunction with it, meetings are held of the Geological, Zoological, and Botanical Societies of Switzerland.

THE German Association for the Promotion of the Teaching of Mathematics and the Natural Sciences held its general meeting at Giessen from May 27th to 30th. The program included lectures on the teaching of physics and of geometry and on the use of text-books in the biological sciences.

THE second session of the New York State Entomological Field Station will be held at Ithaca during the summer months. Professor J. G. Needham, of Lake Forest University, will continue in charge of the work. The re-

port of the first session, held at Saranac Inn last summer, is expected to be issued shortly.

The Peary Arctic Club has chartered for this summer the steamer Erik, lately purchased from the Hudson Bay Company by Captain James A. Farquhar, of Halifax. It will sail from Sydney, C. B., about the middle of July, and will return, it is expected, about two months later, with full details of what has occurred during the two years since Mr. Peary has been heard from; also with information of the voyage of the Windward, in which Mrs. Peary and Miss Peary sailed from Sydney last year for the North.

It is reported in the English papers that an American citizen has presented to the Pope a large telescope for the observatory in the Vatican. This observatory, under Father Denza, has carried on active researches since its reorganization in 1888.

A CABLEGRAM to the daily papers from Berlin states that during the past month experiments have been made between Berlin and Hamburg with the system of rapid telegraphy invented by the late Professor H. A. Rowland, of Baltimore, and it is said that the results are most satisfactory—the new system easily doing double the work done by the Baudot apparatus-and that the German Postal Department intends to introduce the Rowland system between Berlin, Hamburg, Cologne, Leipsic, and The system makes possible the Frankfort. transmission of eight messages simultaneously over a single wire, four in each direction, at the rate of forty words a minute.

WE learn from Nature that this year's Deutscher Geographentag opened at Breslau on Monday, May 27th. On the morning of May 28th Professor Neumayer proposed to present the report of a committee upon Antarctic exploration and to speak upon magnetic investigations in polar regions; Dr. E. Philippi on the 'Geological Problems of the German Antarctic Expedition,' and Professor A. Supan on the 'Antarctic Climate.' At the second sitting the subject to be discussed was the organization of geographical instruction, the speakers being Professor H. Wagner, Dr. Auler and Herr H. Fischer. On Wednesday morning, May 29th,

the subjects brought before the meeting related to the scientific study of lands and native races of German colonies. The speakers include Professor F. v. Richthofen, Professor G. Volkens, Dr. E. Kohlschütter, Professor K. Dove and Professor Schenck. The methods of geographical instruction were discussed in the afternoon of the same day by Mr. A. Becker, Professor A. Fischer, Professor A. Kirchhoff, Professor Langenbeck and Professor A. Bludau; demonstrations will also be planned by Professor K. Dove and Dr. M. Ebeling. In the evening an illustrated lecture was announced on glacier markings in Montenegro, by Professor K. Hassert, and one on the volcanoes of central France, by Dr. M. Friederichsen. At the fifth sitting, on May 30th, the papers dealt with various aspects of glaciers and glaciation, and the speakers included Professors Finsterwalder, H. Meyer, S. Günther, A. Penck, W. Goetz and Dr. W. Halbfass. On the afternoon of the same day, reports and papers were received from Professor A. Kirchhoff and C. M. Kan, and Dr. K. Sapper; and the general business of the association was transacted. Excursions have been arranged for a few days at the end of the meeting, and exhibits of geographical interest are on view in two museums in Breslau.

UNIVERSITY AND EDUCATIONAL NEWS.

THE Wisconsin Legislature has appropriated for the University of Wisconsin, at Madison, \$210,000, in addition to the regular income previously derived from the State. Of this sum \$150,000 is for a new building for the College of Agriculture, which is to house the administration offices of this department and the experiment station as well as the departments of bacteriology and chemistry. This College also receives \$10,000 annual increase to its present income. The College of Engineering receives \$30,000 for equipment of its new building which was provided by the last Legislature; also \$7,500 annual increase in income. The newly organized School of Commerce secures \$3,500 annual increase in its appropriations.

MR. EDWARD TUCK has given Dartmouth

College \$100,000 for a building for the Amos Tuck School of Administration and Finance. The College has also received a bequest of \$10,000 from Mrs. Susan A. Brown as a library fund for the Department of Philosophy.

The trustees of the John Carter Brown Library, acting under the provisions of the will of the late Mr. John Nicholas Brown, have decided to present the library with its \$650,000 endowment to Brown University. This is the finest collection of Americana in existence. In addition to the books, whose value it is difficult to estimate, there will come to the university \$150,000 for a library building and \$500,000 of permanent endowment.

Mr. Andrew Carnegie has, as our readers doubtless know, offered to give £2,000,000 to the four Scottish Universities, Edinburgh, Glasgow, Aberdeen and St. Andrews, for the free education of Scottish students. He estimates that this income will pay the fees of all the students in the universities, including, we understand, the professional schools.

THE Council of Columbia University has resolved that all candidates for degrees at commencement shall be presented in English and that all degrees shall be conferred in English. Hitherto Latin has been used in part.

PROFESSOR R. W. WOOD, of the University of Wisconsin, has been appointed professor of physics in the Johns Hopkins University.

Professor H. B. Lathrop, who holds the chair of rhetoric at Stanford University, has resigned and has accepted the position of assistant professor of English in the University of Wisconsin.

Albert Prescott Mathews, Ph.D. (Columbia), has been elected assistant professor of physiological chemistry in the University of Chicago, and will be head of the department.

Dr. O. M. Stewart, instructor in physics in Cornell University, has been appointed assistant professor of physics in the University of Missouri.

Dr. E. Schellwein has been promoted to an assistant professorship of geology and paleontology at the University at Königsberg.