making its existence known, as well as of contributing to its efficiency and completeness by endeavoring to secure the indexing of scientific publications at the time of issue, in accordance with the plan adopted by the Royal Society." Lord Reay announced that the British Academy was taking steps to publish a similar catalogue for philology, and the other branches of learning not included among the sciences of nature.

M. Boutroux gave a brief account of the work completed and contemplated in connection with the preparation of a complete edition of the works of Leibniz. Professor Waldeyer presented, on behalf of the commission for investigating the anatomy of the brain, a report of the sitting of the committee of May 24. The report stated that a meeting had been held of the invited members of the central commission and of the seven special commissions for brain investigation, and that there were present members both of the central commission and of the special commissions. Professor Waldeyer was elected chairman in place of the late Professor His, of whose memory Mr. Cunningham spoke in warm terms.

Professor Fredericq presented the report of the late Professor Marey on the work of the Institut Marey, and moved the following resolution—"The International Association of Academies approves the nomination of MM. Lippmann, Amagat, Charles Richet, Blix, Einthoven, Grützner, Langendorff, Schenck, Athanasiu as new members of the Marey Institut. After having considered the report of the late Professor Marey, dated May 5, 1904, on the work of the institute, the association congratulates the committee of the Marey Institut in having obtained in France recognition as being of public utility, and thus secured the permanence of this international scientific organization. The association expresses its best wishes for the success of the scientific work undertaken at the institute."

Sir A. Geikie, on behalf of the International Geological Congress, moved the following resolution: "The International Association having received and considered a reference made to it by the International Geological Congress held at Vienna, 1903, resolves to ask the International Geodetic Association to take into consideration whether and (or) in what way it can undertake or promote international cooperation in the investigation of the following subjects: 'Precise determination of levels in mountain chains subject to earthquakes, with the view of ascertaining whether such chains are stable or are undergoing movements of elevation or depression.' 'Measurements of the value of gravity with the object, so far as geological questions are concerned, of throwing light on the internal distribution of masses in the earth, and on the rigidity or isostasy of the terrestrial crust."

The president proposed Vienna as the place of meeting of the next general assembly in 1907. The proposal was adopted unanimously.

## SCIENTIFIC NOTES AND NEWS.

At the jubilee celebrations of the University of Wisconsin the degree of doctor of laws was conferred on a number of delegates, including Henry Prentiss Armsby, director of the Pennsylvania Agricultural Experiment Station; Thomas C. Chamberlin, professor of geology, University of Chicago; Professor W. G. Farlow, Harvard University; Dr. Daniel Coit Gilman, president of Carnegie Institution; the Hon. James Wilson, secretary of agriculture; Robert S. Woodward, dean of the faculty of pure science, Columbia University; F. P. Mall, professor of anatomy, Johns Hopkins University; E. L. Mark, Hersey professor of anatomy, Harvard University; Professor S. L. Penfield, professor of mineralogy, Sheffield Scientific School, Yale University.

The Chemical Society of London has elected as foreign members Professor E. W. Morley, of the Western Reserve University; Professor F. W. Clarke, of the U. S. Geological Survey, and Professor A. H. Becquerel, Professor C. A. L. de Bruyn, Madame Curie and Professor C. T. Liebermann.

COLUMBIA UNIVERSITY has conferred its doctorate of science on Professor Hugo De Vries, the eminent botanist of the University of Amsterdam.

On May 28 the delegates to the International Association of Academies were divided into two groups, one of which visited Oxford and the other Cambridge, where honorary degrees were conferred. We have already noted the degrees conferred at Cambridge; the recipients of the D.Sc. degree at Oxford were Professor Flechsig, Leipzig; Professor E. Ehlers, Göttingen; M. A. Giard, Paris; Dr. Victor von Lang, Vienna; Professor H. Mohn, Christiania, and Professor H. Obersteiner, Vienna.

On June 22 Oxford will confer further doctorates of science as follows: The Hon. C. A. Parsons, St. John's College, Cambridge; M. Pierre Curie, professeur de physique générale de l'Ecole Municipale de Physique et de Chimie Industrielles; Sir W. S. Church, president of the Royal College of Physicians; Sir Andrew Noble; Sir William Crookes; Sir David Gill, astronomer royal, Cape of Good Hope; Sir John Murray; Professor Alfred Marshall, professor of political economy at Cambridge; Professor J. J. Thomson, Cavendish professor of experimental physics at Cambridge; Professor Horace Lamb, professor of mathematics, Victoria University of Manchester: Professor A. R. Forsyth, Sadlerian professor of pure mathematics at Cambridge; Professor Dewar, Jacksonian professor of experimental philosophy, Cambridge, Fullerian professor of chemistry in the Royal Institution; and Professor Larmor, secretary of the Royal Society, Lucasian professor of mathematics at Cambridge.

W. F. M. Goss, dean of the Schools of Engineering of Purdue University, has received the honorary degree of Doctor of Engineering from the University of Illinois.

Professor J. M. Van Vleck, who holds the chair of mathematics and astronomy at Wesleyan University and has been a member of the faculty for fifty-one years, has been made professor emeritus, and at his own request relieved from obligation of further service.

MEDICAL exchanges state that on his return from America recently, Professor Ehrlich was presented with a portrait medallion, by a group of sixty-five pupils and co-workers. He has been given the title of privy councilor, and is entitled to write 'von' before his name. The occasion of the presentation was his fiftieth birthday, which occurred on May 15.

Professor Svante Arrhenius, of Stockholm, lectured before the Royal Institution, London, on June 3, on electrolytic dissociation. He sailed for America on the American liner St. Louis on June 11.

Professor Paul Hanus, of the Department of Education of Harvard University, will spend next year abroad.

Dr. Heinrich Ries, professor of economic geology in Cornell University, will spend the summer studying the clays of Wisconsin. Mr. F. L. Gallup of the senior class will accompany him as assistant.

WM. W. COBLENTZ has been reappointed research assistant by the Carnegie Institution to continue his work on infra-red radiation at Cornell University.

MISS ROSE MARIA LOGAN, and Miss Mary J. Hogue, of the Women's College of Baltimore, have been awarded scholarships admitting them to tables at the Marine Laboratory, at Woods Hole, Mass., and Miss Mary Gillespie Webb and Miss Carrie S. Bird, to tables at the Brooklyn Institute of Arts and Sciences, Cold Spring Harbor, Long Island, N. Y.

The British Medical Journal states that Mr. T. J. Britten, formerly manager of the Wolhuter Gold Mines, has been awarded the first prize of £500 and the gold medal offered by the Transvaal Chamber of Mines for the best appliance for the prevention of miners' phthisis. The suggested remedy is damping the dust by means of a water jet while drilling is in progress and while the blasting is taking place.

MLLE. JOTEYKO, lecturer on psychology in the University of Brussels, has been elected vice-president of the Neurological Society of Belgium.

The eighty-seventh annual meeting of the Société helvétiques des sciences naturelles will be held at Winterhour from July 30 to August 2, under the presidency of Professor J. Weber.

Dr. Wilhelm Rein, professor of education in the University of Jena, has accepted an invitation to deliver two lectures before the University of Manchester. The university will confer on him the degree of Doctor of Letters.

A BRONZE statue of Dr. Benjamin Rush, given to the nation by the American Medical Association, was unveiled at Washington on The statue, which stands in the grounds of the U.S. Naval Museum, is of heroic size. It stands on a base of Indian limestone, on which are four bas-relief panels. The one in front bears the inscription, 'Dr. Benjamin Rush, Physician and Philanthropist. 1745-1813.' One panel bears crossed swords and a wreath and beneath is inscribed, 'Signer of the Declaration of Independence.' Another panel bears a scroll, a pen and wreath with the inscription, 'First American Alienist.' The remaining panel bears the staff of Mercury, and the quotation 'Studium Sine Calamo Somnium. Mr. Louis R. Metcalfe was the architect of the statue, Mr. R. Hinton Perry the sculptor, and J. W. Pacey the builder. The statue was presented by Dr. J. H. Musser, president of the American Medical Association, and accepted by President Roosevelt. An address in honor of Dr. Rush was given by Dr. J. C. Wilson, of Philadelphia.

WE learn from the Journal of the American Medical Association that the street at Nancy, where Liebeault lived until his death last February, has been named after him, and will be known henceforth as Rue du Docteur Liébeault. He was the founder of the Nancy school of hypnology, and was in his eighty-second year at the time of his death.

A BRONZE medallion portrait in memory of the late Professor Adamson was unveiled at the University of Manchester on June 3, Professor Sorley, of Cambridge, making the principal address.

Mr. Robert McLachlan, F.R.S., the well-known British entomologist, whose work has been more particularly on the neuroptera, died on May 23, at the age of sixty-seven years.

We regret also to record the deaths of M. E. D. del Castilo, the botanist, and of Professor Amato Amati, an Italian writer on geography.

THE British Association for the Advancement of Science has been invited to meet in York in 1906.

The Station for Experimental Evolution of the Department of Experimental Biology of the Carnegie Institution at Cold Spring Harbor, L. I., was formally opened on Saturday, June 11. An introductory address was made by Director C. B. Davenport and a historical address by Mr. Walter R. T. Jones, of the Wawepex Society, which has presented land for the station. Dr. John S. Billings made an address of acceptance as chairman of the executive committee of the Carnegie Institution, and Dr. Franklin W. Hooper made an address of welcome on behalf of the biological laboratory of the Brooklyn Institute. scientific address was made by Professor Hugo De Vries, director of the Botanical Gardens at Amsterdam.

WE learn from the London Times that a first report of the application of the Liverpool Cancer Research Fund, given by Mr. Sutton Timmis, as a memorial of his wife, has just been published. The fund consists of a sum of £10,000, of which an amount not exceeding £1,500 may be spent annually under the direction of a committee, the proceedings of which have been brought into close relation with the Liverpool Royal Infirmary and with the Liverpool University. In addition to a brief history of the establishment of the fund, and to a financial statement, the report contains an account, by the director of the research, Dr. Grünbaum, of the lines upon which it has been begun and will be continued. These are chiefly experimental, as it is felt that statistical and geographical inquiries may be more effectively undertaken by the London and German committees.

Some further details are now announced in regard to the eighth International Geographic Congress, to be held in September, and for the first time in the United States. It will open at the Columbian University, Washing-

ton, on Thursday, September 8, an informal reception being held at the Hubbard Memorial Hall by President McGee of the National Geographic Society the evening before. Three days will be allotted to Washington; general meetings being held in the morning; sectional meetings and receptions and social gatherings in the afternoon. Mrs. Gardiner G. Hubbard will receive the Congress at 'Twin Oaks,' on Friday afteroon; the Smithsonian Institution on Saturday afternoon, and Commander Robert E. Peary, U. S. N., on Saturday even-The Philadelphia Geographical Society will entertain the Congress on Monday, September 12, with field meeting and a reception; the American Geographical Society in New York on September 13 and 14, luncheon being served each day at the American Museum of Natural History; a trip up the Hudson will occupy September 15; a field meeting at Niagara Falls, September 16; Chicago will occupy September 17, and meetings on September 19, 20 and 21, will be held with the Congress of Arts and Science at St. Louis. A far west trip is planned after adjournment, and on return to Washington President Roosevelt will receive the members.

Mr. Ferrier, secretary of the Scottish Antarctic Expedition, has received and printed a letter from Mr. W. S. Bruce, the leader of the expedition, in which he says: "We have reached the southeastern extremity of the Weddell Sea, discovering there a great barrier of ice, part of the Antarctic Continent. have gone 215 miles further south than last year, and 180 further than Ross in this part of the Antarctic regions. We got beset here in 74 S., 23 W., and were frozen in for a week, from the 7th to the 12th of March. When we got out by chance I thought it wisest not to proceed further in trying to get south and west, but to continue our program to the We sounded from here up to northeast. Gough Island and from Gough Island to the Cape, revolutionizing the map of the South American Ocean by finding relatively shallow where specially deep water was expected."

Reuter's Agency learns that the scientific expedition which left England in February

under Lieutenant Boyd Alexander for the forest region between the West Coast and Lake Chad arrived in canoes at Ibi, 250 miles up the Binue River, in April. The expedition had two sectional steel boats, and other canoes with stores, etc., were following up the river. The explorers, all of whom were in good health, had already been making some collections on the Binue and intended landing at Ibi with a view to pushing north into Bauchi. It was intended that the boats should proceed further up to the Gongola River, whence they would be carried across to Yo, on Lake Chad. From the lake itself it was intended to strike to the eastward.

The American Chemical Society will, as we have already announced, hold its thirtieth general meeting at Providence, R. I., on June 21, 22 and 23. The hotel headquarters will be the Narragansett Hotel. On Tuesday, June 21, at 10:00 A.M., the first session of the meeting will be held in the lecture room of Rockefeller Hall, of Brown University. There will be an address of welcome by the president of Brown University, Dr. Wm. H. P. Faunce, followed by a response on behalf of the society by its president, Dr. A. A. Noyes. The remainder of the morning session will be devoted to the reading and discussion of papers. Arrangements for afternoon visits and excursions will be announced on the program of the meetings, or at the morning session. Wednesday, at 9 A.M., a session for general business and the reading and discussion of papers will be held in the lecture room of Rockefeller Hall. A part of this session will be given to brief reports on researches which have been in progress in various universities and colleges during the past year. Such reports have already been promised from a number of institutions, and it is intended to make this a new and special feature of the meeting. Arrangements for afternoon visits and excursions will be announced on the program of the meetings, or at the morning session. Thursday arrangements will be made for excursions and visits in addition to those planned for the other two days of the meeting.

A METEOROLOGICAL station of the U. S. Weather Bureau, under the charge of Mr. Alexander McC. Ashley, formerly local forecaster at Syracuse, N. Y., will be established at Honolulu.

In response to a letter received from Mr. Calvin W. Rice, chairman of the American Institute of Electrical Engineers' Building Fund Committee, the executive committee of the Iowa State College branch of the institute appointed a local committee to solicit subscriptions from the local members and 'students' of the institute. The committee consists of Mr. B. S. Lanphear, chairman, Mr. G. W. Bissell and Mr. F. A. Pielsticker. The committee has been very successful, having raised about \$700, with several of the local members yet to be interviewed. It is thought that the interest which has thus been aroused in institute matters will materially strengthen the local organization and thus eventually prove of even greater benefit to the local branch than to the institute building fund.

REUTER'S AGENCY reports that the Marconi wireless telegraph stations at Bari and Antivari (Montenegro) have now been erected for a month, and are in regular working order. Signor Marconi will personally open them in July next on his return to Italy. The high power station at Coltano (Pisa), near the royal farm of San Rossore, will be the largest in the world, and will be built entirely of It will be ready in August or September, after which the engines and other apparatus will be installed, so that it may begin working not later than the beginning The Coltano station will be able to of 1905. communicate with Great Britain, Canada, the United States and the Netherlands, as well as with all vessels in the Mediterranean, the Baltic, the Red Sea, the Atlantic Ocean and the Indian Ocean. Signor Marconi has signed contracts with Chile and Argentina to construct telegraph stations.

REUTER'S Liverpool correspondent forwards information with regard to the Congo expedition which the Liverpool School of Tropical Medicine despatched to the Free State at the request of the King of the Belgians, for the

purpose of studying trypanosomiasis, or sleeping sickness, in the autumn of 1903. expedition consisted of Dr. J. E. Dutton and Dr. J. L. Todd, who formed the recent trypanosomiasis expedition of the school to Senegambia, and Dr. C. Christy, who was a member of the Royal Society's commission, sent to Uganda to study sleeping sickness. The expedition left England early in September last, and proceeded direct to Boma, where they stayed until the end of the year. Boma the Belgian authorities attached a state medical officer, Dr. Heiberg, to the expedition, a step which was all the more appreciated from the fact that Dr. Heiberg was at one time a student at the Liverpool School of Tropical Medicine. After a stay of six weeks at Boma, the expedition proceeded to Matadi, where they remained for a few days. Dr. Dutton and Dr. Christy then went through the cataract region, their tour lasting three weeks, when they joined Dr. Todd and Dr. Heiberg, who had preceded them, at Leopoldsville. A long stay of over four months was made at Leopoldsville, where the government placed a spacious bungalow at the disposal of the expedition, and subsequently built a hospital for the special study by the expedition of sleeping sickness Thanks to this the members were enabled to make careful observations, extending over several months, of sleeping sickness under the most favorable conditions possible, and to work without encountering the obstacles so frequently met with by expeditions in similar climes, who have not had the opportunity of remaining for a sufficient length of time in a suitable district under such favorable circumstances. As the cases of sickness were very numerous, a great amount of material was available, and the expedition were able to study closely all the different types of cases. Dr. Christy left for home on May 1, the other members, Dr. Todd and Dr. Dutton proceeding up the Congo River, where the expedition will continue their researches in the littleknown regions of the interior. Their latest report was that they were in good health. Dr. Christy brought home with him to Europe by the Anversville three natives suffering from trypanosomiasis, the disease generally known as sleeping sickness. It may be pointed out here that in a large percentage of cases in the Congo actual sleep is apparently not a marked feature in the progress of the The work undertaken by the expedition has grown to very large dimensions, especially taking into consideration the expensive research being carried on in Liverpool in connection with the operations in the Congo. The work in the laboratories of the school in Liverpool consists of bacteriological and other investigations, which, owing to the lack of necessary apparatus, can not be adequately carried on in the Congo itself. expenditure accordingly has already reached a very large sum, and the thanks of the scientific world are due to the King of the Belgians, Sir Alfred Jones, and other supporters of the Liverpool School of Tropical Medicine, whose generosity has up to the present made investigations on so large a scale possible.

## UNIVERSITY AND EDUCATIONAL NEWS.

The new medical laboratories of the University of Pennsylvania, erected at a cost of \$700,000, were dedicated on June 10. The building was formally presented to the university by J. Vaughn Merrick, and accepted by Provost Charles C. Harrison.

NEW YORK UNIVERSITY has purchased land adjoining the new college building on First Avenue, between Twenty-fifth and Twenty-sixth streets, and will proceed at once with the erection of a six-story fire-proof building for the clinics and laboratories of the Medical College.

The University of Michigan has established a statistical laboratory under Dr. James W. Glover, who has charge of the work in insurance.

The main building of the Rensselaer Polytechnic Institute, Troy, N. Y., was destroyed by fire on June 9. The loss is estimated at \$100,000, the insurance being \$53,000. Other fires have recently occurred at the institute, and they are supposed to be the work of an incendiary.

A BOARD OF ANTHROPOLOGICAL STUDIES has been established at Cambridge, the studies under the direction of the board comprising prehistoric and historic anthropology and ethnology (including sociology and comparative religion), physical anthropology and psychological anthropology.

The University of London, with the cooperation of the Teachers' Guild of Great Britain and Ireland, will organize a four weeks' holiday course for foreigners, to be held in London this summer, from July 18 to August 12, with special arrangements for those who can not join till the end of July. Professor Rippman, of Queen's College, London, has been appointed director and Mr. Cloudesley Brereton will act as adviser to French students. The inaugural address will be given by Sir Arthur Rücker, principal of the university.

Dr. Thomas M. Balliet has resigned the superintendency of Public Schools of Springfield, Mass., a position he has filled for sixteen years, having accepted the deanship of the School of Pedagogy of New York University, his resignation to take effect September 1. In accepting his resignation the committee adopted a resolution of regret and at the same time congratulated the university which is to secure his services.

Professor Angelo Heilprin, of Philadelphia, late president of the Geographical Society of that city, has been appointed lecturer in physical geography in the Sheffield Scientific School of Yale University.

At the meeting of the Board of Regents of the University of Nebraska, on May 26, Dr. Thaddeus L. Bolton, assistant professor of philosophy was made professor of psychology.

At the June meeting of the regents of the University of Minnesota, Mr. E. W. D. Holway was appointed assistant professor in botany.

At Cambridge Mr. W. J. Sell and Mr. H. J. H. Fenton, of Christ's College, have been appointed university lecturers in chemistry, and Mr. A. Harker, of St. John's College, university lecturer in petrology.