town University, and Dr. L. O. Howard, permanent secretary of the American Association for the Advancement of Science.

In late March, this committee sent out an appeal to members urging contributions to aid in the erection of the memorial building. The committee reports that to April 19, contributions had been received to the amount of \$4,050. The committee still hopes to receive a considerably larger sum and the general committee of the George Washington Memorial Association is much pleased with the generous and immediate response from the members of the American Association.

## SCIENTIFIC NOTES AND NEWS

Members of the National Academy of Sciences have been elected as follows: Forest Ray Moulton, assistant professor of astronomy in the University of Chicago; William Albert Noyes, professor of chemistry in the University of Illinois; Thomas Burr Osborne, research chemist in the Connecticut Agricultural Experiment Station; Charles Schuchert, professor of paleontology in Yale University; Douglas Houghton Campbell, professor of botany in Stanford University; Jacques Loeb, professor of physiology in the University of California, who will become head of a department in the Rockefeller Institute for Medical Research, and John Dewey, professor of philosophy in Columbia University. Dr. George E. Hale, director of the Mount Wilson Solar Observatory of the Carnegie Institution, has been elected foreign secretary of the academy, to succeed the late Mr. Alexander Agassiz. The Draper medal has been conferred on Dr. C. G. Abbot, director of the Astrophysical Observatory of the Smithsonian Institution.

Dr. John Trowbridge, Rumford professor and lecturer on the application of science to the useful arts, at Harvard University, and director of the Jefferson Physical Laboratory, will retire from active service at the close of the present academic year.

Dr. Leo Loeb has resigned his position as assistant professor of experimental pathology in the University of Pennsylvania and will

take up the directorship of the pathological department of the St. Louis Skin and Cancer Hospital on September 1 of the present year. Dr. Moyer S. Fleisher, of Philadelphia, accompanies him as one of his assistants.

Professor Robert Koch, who has been seriously ill with pneumonia at Berlin, is now making favorable progress.

Dr. Bashford Dean, Columbia University, has lately received a silver cup from the Emperor of Japan in recognition of his services to Japanese zoology.

THE Linnean Society will award the Linnean gold medal to Professor Georg Ossian Sars, professor of zoology in the University of Christiania.

Professor F. W. Putnam, of Harvard University, has been elected a corresponding member of the Societá Romana di Anthropologia, of Rome.

M. CHARLES LALLEMAND has been elected a member of the Paris Academy of Sciences in the section of geography and navigation in the place of the late Bouquet de la Grye.

SIR ERNEST SHACKLETON, the Antarctic explorer, was presented with a gold medal by the Geographical Society of Pennsylvania at a dinner given in his honor at Philadelphia on April 22. Rear Admiral George Melville and Amos Bonsall, a survivor of the Kane Arctic expedition, were among the speakers.

McGill University will confer on Professor Louis A. Herdt, head of the department of electrical engineering, the degree of doctor of science.

Dr. M. P. RAVENEL, head of the department of bacteriology of the University of Wisconsin, and of the State Hygienic Laboratory, is a member of the American committee to report at the Second International Congress of Alimentary Hygiene at Brussels, Belgium, October 4, on bacteriological aspects of the hygiene of nutrition.

The Academy of Natural Sciences of Philadelphia has appointed Professor J. C. Arthur, of Purdue University, a delegate to represent it at the third international Botanical Congress.

Wellesley College has appointed Professor C. B. Thompson delegate to the international zoological congress at Graz. Miss Thompson will sail for Antwerp on June 25, and will spend the greater part of the summer in Austria.

Dr. James R. Angell, professor of psychology in the University of Chicago, has left this country for Great Britain.

Dr. W. CRAMER, of the physiological department of the University of Edinburgh, is visiting some of the American universities.

Memorial services were held in Sage chapel at Cornell on April 24 for Ross G. Marvin, who lost his life on the Peary expedition. Commander Peary delivered the memorial address, dedicating a tablet which has been erected in the chapel to Professor Marvin's memory. President Jacob Gould Schurman read a biographical sketch, written by Professor O. M. Leland, a member of the faculty of the College of Civil Engineering, to which Professor Marvin belonged.

THE death is announced of M. Charlois, of the Nice Observatory, known especially for his work on the minor planets.

Mr. C. Bird, headmaster of the Rochester Mathematical School and the author of text-books on geography and geology, died on April 11, aged sixty-seven years.

The senate committee has given its approval to a proposed amendment to the sundry civil bill providing for the establishment of a seismological laboratory in connection with the Smithsonian Institution. The proposed annual appropriation is \$20,000.

A JOINT meeting of the American Society of Mechanical Engineers with the Institution of Mechanical Engineers will be held this summer in Birmingham and London, beginning on July 26.

WE learn from *Nature* that in connection with the aviation week to be held at Verona in the first fortnight of May, it is proposed to organize a first International Congress on Aerial Locomotion. On the scientific side the movement has received the support of Professors Angelo Battelli (Pisa), Giovanni

Celoria (Brera Observatory), Giuseppe Colombo (Milan), Count Almerigo di Schio, Dr. Enrico Forlanini, Professor Luigi Palazzo, Professor Righi (Bologna), Professor Vito Volterra (Rome).

A preliminary program has been issued for this year's meeting of the British Association, which is to take place at Sheffield on August 31 and following days. The president, the Rev. Professor T. G. Bonney, will have the assistance of representatives of the municipal. educational, ecclesiastical and commercial activities of the city, who have been appointed as vice-presidents for the meeting, headed by the Lord Mayor, the Rt. Hon. Earl Fitzwil-To the list of sections, whose presidents have already been announced, there has been added, as in previous years, a sub-section of agriculture, which this year will be formed under the section of chemistry, with Mr. A. D. Hall, F.R.S., as chairman. The conference of Delegates of Corresponding Societies will assemble this year as usual, at Sheffield, during the meeting, and not in London, as last year, when the meeting was in Canada. Its chairman will be Dr. Tempest Anderson. The reception room and administrative offices during the meeting will be established in the Cutlers' Hall. It is centrally situated, and a great majority of the sectional meeting-rooms will be within a very short distance of it. The Victoria Hall will be the scene of the opening meeting on Wednesday evening, August 31, when Professor Bonney will deliver his inaugural address. In the same hall the first evening discourse will be delivered on the Friday evening by Professor William Stirling on "Types of Animal Movement," and the second on the Monday evening by Mr. D. G. Hogarth on "New Discoveries about the Hittites." Receptions are announced to be given by the lord mayor and by the university, and a number of garden parties will be arranged. The city itself and its vicinity offer a wide range of scientific interests, as for example to chemists and metallurgists, geologists, and students of economic and educational problems, while its close proximity to the Peak district, the "Dukeries" and other interesting localities affords many opportunities for relaxation.

Owing to the delay in the issuance of the second circular of the Eighth International Zoological Congress, at Graz, the president requests us to call the attention of the American members to the following points. Apparently all the state railways of Austria as well as the "Südbahn" will allow a very material reduction in the price of tickets, upon the exhibition of membership or participant's cards as soon as the Austrian frontier is crossed. It is therefore best for all to have these cards before entering Austria and prospective members should send their remittance (members 25 Kronen, participants 12 Kronen -a Krone is a little more than 20 cents) to the "account of the VIII. International Zoological Congress" at the Steiermärkische Escomptebank in Graz. All applications for accommodations should be addressed to the Præsidium des VIII. Internationalen Zoologenkongress, Universitätsplatz 2, Graz, Austria, and should specify the number of rooms, beds, price desired, the day, and where possible the hour of arrival in Graz. The hotel accommodations of the city are rather limited and it is probable that students' rooms will have to be used, this involving getting the meals in another place. It is expected that the English edition of the second circular will be issued about the first of May.

GRADUATE students in geology from the University of Wisconsin are spending the month of May in detailed mapping of the pre-Cambrian rocks of the Menominee ironbearing district of Michigan. Professor C. K. Leith and Mr. W. J. Mead are in charge of the party. This work constitutes a regular course in geology at the University of Wisconsin.

The first meeting of New York state teachers of educational psychology was held at Ithaca, April 8 and 9, at the invitation of the Educational Department of Cornell University. Representatives of the college and normal schools of the state discussed the extent and form of instruction in the nervous system, and the place of experimental work,

in the course in educational psychology. The latter discussion resulted in the formulation of the chief purposes for which experimental work might be introduced, and of the criteria for the selection of specific experiments. The discussion of experimental work was supplemented by an exhibition of the apparatus used for demonstration in the Cornell course in general psychology, of the drill and research equipment of the psychological laboratory, and of apparatus in the educational laboratory for the conduct of mental tests. By invitation, the evening meeting was held in the psychological laboratory, where the formal program was followed by an exposition by Professor Titchener of the contributions of the Cornell laboratory to structural psychology, with special reference to the experimental psychology of the thought-processes. A committee consisting of Professor G. M. Whipple, of Cornell (chairman), Professor George M. Forbes, of Rochester, Dr. W. Van Dyke Bingham, of Columbia, and Dr. Susan F. Chase, of the Buffalo Normal School, was appointed to arrange for a meeting next year.

Provision has been made for instruction and field work in botany, zoology and geography at the Illinois Biological Station recently established on Quiver Lake, an offset of the Illinois River one and a fourth miles above Havana in Mason County, Illinois. The students will have as the field of their observations, the banks of the Illinois River itself, a series of lakes, streams and bayous of the vicinity, and the bottoms, bluffs and uplands adjacent, which present a great variety of situations unusually rich in all plant and animal forms. All students will have the use of the Chautauqua grounds of the State Association of Epworth Leagues. Sleeping and dining rooms, laboratories and a lecture room are thus provided, ready for use. The grounds are on a forest-covered, somewhat sandy, elevated bank or bluff, bordering Quiver Lake, are lighted by electricity and are abundantly supplied with pure water. The session will begin June 20 and continue six weeks.

THE New York Botanical Garden has arranged spring lectures to be delivered in the lecture hall of the museum building of the garden, Bronx Park, on Saturday afternoons, at four o'clock, as follows:

April 30—"Spring Flowers," Dr. N. L. Britton. May 7—"Collecting in Southern Mexico," Dr. W. A. Murrill.

May 14—"The Origin and Formation of Coal," Dr. Arthur Hollick.

May 21—"Water Lilies," Mr. George V. Nash. May 28—"An Expedition to the Panama Canal Zone," Dr. M. A. Howe.

June 4—"Summer Flowers," Dr. N. L. Britton. June 11—"The Rose and its History," Mr. George V. Nash.

June 18—"The Native Trees of the Hudson Valley," Mr. Norman Taylor.

June 25—"The Extinct Flora of New York City and Vicinity," Dr. Arthur Hollick.

July 2—"The Fungous Diseases of Shade Trees," Dr. W. A. Murrill.

THE Third International Physiotherapeutic Congress was inaugurated by President Fallières in the courtyard of the School of Medicine at Paris, on March 29. The London Times states that a large number of members of the French government and the diplomatic corps in Paris, including the British and American ambassadors, were present at the ceremony. M. Fallières in his address declared that all questions relating to the public health were the intimate concern of every government. He spoke of the advance of medical science in having established the fact that some diseases which were the great scourges of humanity could no longer be regarded as "inevitable," and he ventured to look forward to the day when by the aid of medical science these diseases would be actually eliminated. He also felt that the medical profession was justified in its hope of a future population which would be better adapted physically for the struggle of modern life in the office and in the workshop.

## UNIVERSITY AND EDUCATIONAL NEWS

Assemblyman Whitney's bill to establish a state school of sanitary science and public health at Cornell University, and to appro-

priate \$10,000 toward its maintenance, has passed the New York assembly.

The mining engineering building of the University of Wisconsin, formerly the old heating plant, has been entirely rearranged for its new purposes, and is nearing completion, much of the equipment of modern mining machinery having already arrived, and the laboratories will soon be in readiness for research and instruction.

Dr. A. Stanley McKenzie, professor of physics at Dalhousie University, and previously at Bryn Mawr College, has accepted a chair of physics at the Stevens Institute of Technology.

DR. CHARLES A. KOFOID, associate professor of histology and embryology in the University of California, has been appointed professor of zoology in that institution.

MR. HENRY HOMAN JEFFCOTT, head of the meteorology department of the British National Physical Laboratory, has been appointed to the chair of engineering in the Royal College of Science for Ireland.

## DISCUSSION AND CORRESPONDENCE THE PLANET MARS

To the Editor of Science: I should very much like to urge the importance of the suggestion made by Professor R. G. Aitken in the issue of Science for January 21, 1910, that Mr. Percival Lowell invite a committee of recognized experts in planetary observation, to go to Flagstaff and with him to observe the planet Mars (and if possible Venus and Mercury also).

I find here in South America just as keen an interest by the public in the real state of our knowledge as to Mars, as anywhere in the world, and am sure that no greater service could be rendered to astronomical science from the standpoint of the intelligent public, than to settle some of the many open questions relating to the surface markings of Mars.

As Professor Aitken points out, "doctors disagree" in this matter and to such an ex-