some judicious measure, the general scale of compensation for the teachers of the university.

'I direct that the professors supported from this endowment be provided with suitable assistance in their several departments, by the appointment of instructors of lower grades, and of draughtsmen, foremen, mechanics, clerks or assistants, as occasion may require, my desire being that the professors be free to devote themselves to whatever part of the teaching requires the greatest skill and largest experience, and to the advancement of their several subjects.

I direct that the president and fellows be free to erect buildings for the purposes of this endowment, and to purchase sites for the same, but only from the income of the endowment.

I direct that all the equipment required to illustrate teaching or to give students opportunity to practice, whether instruments, diagrams, tools, machines or apparatus, be always kept of the best design and quality, so that no antiquated, superseded, or unserviceable implement or machinery shall ever be retained in the lecture-rooms, workshops or laboratories maintained from the endowment.

Finally, I request that the name Gordon McKay be permanently attached to the professorships, buildings and scholarships or other aids for needy students, which may be established, erected or maintained from the income of this endowment.

The American Association for the Advancement of Science will meet at St. Louis during convocation week, beginning on December 28, 1903, under the presidency of the Hon. Carroll D. Wright, U. S. commissioner of labor and president of Clark College. We hope to publish shortly full details in regard to the meeting and the local arrangements.

THE American Society of Naturalists will meet at St. Louis during convocation week. The exercises will consist as usual of a lecture followed by a smoker, a business meeting and a discussion on Wednesday afternoon, and a dinner in the evening followed by the address of the president, professor William Trelease, director of the Missouri Botanical Garden.

The sixteenth winter meeting of the Geological Society of America will be held at St. Louis, Mo., probably in a parlor of the Planters Hotel. The meeting will be called to order by President S. F. Emmons at 10 o'clock A.M., on Wednesday, December 30. The meeting of the Cordilleran Section will be held January 1 and 2, 1904, in the Academy of Sciences, San Francisco.

THE American Chemical Society will meet in St. Louis on December 28 and 29. The headquarters will be the Southern Hotel, and the meeting place will be the Central High School Building. The retiring address of the President, Dr. John H. Long, will be given, probably, on Wednesday evening at 7:30. Subject: 'Some Problems in Fermentation.'

THE American Psychological Association will meet at St. Louis on Tuesday and Wednesday of convocation week under the presidency of Dr. W. L. Bryan, president of the University of Indiana.

The next meeting of the American Philosophical Association will be held at Princeton, N. J., on December 29 and following days. The hospitalities of the meeting and program are also extended to those members of the American Psychological Association who do not meet with their own association in St. Louis.

We hope to publish next week official notices in regard to the other scientific societies meeting during convocation week.

SCIENTIFIC NOTES AND NEWS.

The medical faculty of the University of Buffalo has invited Dr. Samuel J. Meltzer, of New York, to deliver the Harrington lectures for 1903. The subject selected by Dr. Meltzer is 'Edema, a consideration of the physiological and pathological factors concerned in its formation.' The lectures will be delivered in the Medical College, November 30, and December 1, 2 and 3, at 5 P.M.

MR. HENRY RUTGERS MARSHALL, the architect of the library given by Mr. Ralph Voorhees to Rutgers College, and well known for his contributions to psychology, was given the degree of Doctor of Literature on the occasion of the dedication of the library.

Professor Hugo de Vries celebrated the twenty-fifth anniversary of his professorship in the University of Amsterdam on October 25, 1903. On this occasion he was presented with the sum of 4,250 Gulden by his colleagues and admirers in Holland, with the request that this sum be used in prosecuting further researches on mutation in plants. Cooperative experiments in this subject are being carried on in the New York Botanical Garden by Dr. D. T. MacDougal.

Arrangements have been made for a Sigma Xi dinner and address during convocation week at St. Louis. President D. S. Jordan will deliver the address before the society. The society now numbers more than two thousand members in the United States, and a large attendance is expected. Professor A. S. Langsdorf, of Washington University, is secretary of the committee on arrangements.

The Royal Scottish Geographical Society has bestowed honorary membership and its Livingstone gold medal on Commander Robert E. Peary, U.S.N.

It is reported, though perhaps on inadequate authority, that the Nobel prize in physics will be awarded to Mr. G. Marconi; in chemistry to Professor Arrhenius, and in medicine to Professor Finsen.

Professor von Zittel, of Munich, who met with a serious accident recently, is rapidly recovering and hopes to begin his winter semester lectures soon.

Dr. George T. Moore, of the United States Department of Agriculture, is spending a month in Dr. Winogradsky's laboratory at the Imperial Institute for Experimental Medicine, St. Petersburg. He is studying the various soil bacteria, especially those that fix atmospheric nitrogen, and the nitrite and nitrate organisms. Dr. Moore is conducting the investigations of soil bacteria being carried on in the Division of Pathology and Physiology

of the Bureau of Plant Industry, and has already accomplished some important work in this field. He will probably not return to Washington before the middle of January.

Dr. E. B. COPELAND, A.B. (Stanford, '95), who has been instructor in bionomics at Stanford University for the past two years, will sail this week for Manila to take up his work as chief botanist of the U. S. Philippine commission. Miss Mary Isabel McCracken, A.B. (Stanford, '03), will have charge of Dr. Copeland's work in bionomics.

Professor John W. Toumey, of the faculty of the Yale University Forest School, has been elected director of the Yale botanical garden.

Dr. G. P. Merrill, curator of geology at the U. S. National Museum, has returned from a visit to the petrified forests of Mon-

The daily papers state that Dr. W. G. Tight, president of the University of New Mexico, and Miss Annie S. Peck have returned after explorations in Peru. They failed to reach the summit of Mount Sorata, the highest summit in the Andes.

Professor C. F. Chandler, of Columbia University, gave a lecture before the American Philosophical Society on November 6, his subject being 'The Electro-chemical Industries of Niagara Falls.'

Professor R. E. Dodge, Teachers College, Columbia University, began on the twelfth instant a course of lectures on climate and mankind given at the American Museum of Natural History under the auspices of the Board of Education.

On October 2, the winter course of lectures before the American colony in Munich was opened by Professor Hartzell, his subject being 'Volcanic Phenomena.' He was followed by Professor 'Fullerton on the sixteenth and thirtieth, his subject being 'Psychic Phenomena.' It is proposed to have lectures on the first and third Fridays of each month during the winter.

SIR WILLIAM WHITE gave the presidential address before the British Institute of Civil Engineers on November 3.

COMMANDER ROBERT E. PEARY, U.S.N., lec-

tured before the Royal Geographical Society, London, on November 10. He is at present engaged in examining the naval barracks of foreign countries as a member of a commission recently appointed by President Roosevelt.

A MEMORIAL to Professor Joseph Le Conte, has been constructed by the Sierra Club of San Francisco in the Yosemite Valley at a cost of \$8,000. It is a building of granite, erected under the walls of Glacier Point. The building is divided into three parts, the main room measuring 28 x 38 feet. Above the main room a Gothic roof rises to the height of thirty-five feet. Inside are a large reading table, wall seats and a large bookcase in which are kept books and papers pertaining to travel and research and maps and papers furnished by the Sierra Club.

The library of the late Professor Virchow, containing seven thousand volumes has been presented by Mrs. Virchow to the Berlin Medical Society.

THE bronze shield subscribed for by the students of the British Institution of Electrical Engineers was placed on the tomb of Volta, at Camnago, Italy, near Como, on October 4. The shield is mounted on a slab of green marble supported on granite in front of the tomb.

The position of paleontological draughtsman in the U. S. Geological Survey will be filled by civil service examination on December 8. The salary of this position is \$840 or \$900 a year.

A CONFERENCE of Eastern hydrographers, called by Mr. F. H. Newell, chief engineer of the hydrographic division of the Geological Survey, was held in Washington from October 28 to 31, inclusive. The following districts and divisions of the work were represented: New England, Mr. N. C. Grover; New York, Mr. Robert E. Horton; Central States, Mr. E. G. Paul; Southern States, Mr. E. Johnson, Jr.; general inspection, Mr. E. C. Murphy; Washington office, Messrs. G. B. Hollister and John C. Hoyt; hydro-economics, Mr. M. O. Leighton; hydrology, Mr. M. L. Fuller.

According to a Reuter telegram from St. Petersburg, dated October 25, the search for Baron Toll, the missing explorer who set out on May 23, 1902, in company with the astronomer M. Seeberg and two Yakuts to explore Bennett Island and who has not been heard of since, still continues. M. Brousnieff, an engineer, who was sent to relieve Baron Toll, arrived in New Siberia with his expedition on March 11, but found nobody on the island. Five days later he set out across the ice in the direction of Bennett Island, but about 30 kilometers from the coast a stretch of open water at least five kilometers broad was encountered. and the expedition was obliged to turn back. No news has been received of the relief party under Lieutenant Koltchak, which was to have endeavored to reach Bennett Island by boat via New Siberia, and which was expected to reach its goal last June. There is hardly any prospect of further news being received either from the missing explorer or from the relief expeditions before December, as communication between the islands and the mainland will be interrupted until then.

The Vienna Academy of Sciences has appointed a committee to study pitchblende, the mineral from which radium is derived. Baron Auer von Welsbach has placed his laboratories at the service of the committee during its researches.

The Italian Congress of Pathology was held at Florence in October and appointed Milan as the place for the next meeting, which will be held during the spring of 1905. Professors Golgi and Foa were appointed a committee to confer with the German Pathological Society as to whether the approaching congress could be made international.

The New Zealand Parliament has passed a bill empowering the Governor to introduce after January, 1906, the metric system, which is then to become the only system of weights and measures for the country.

Cooperative arrangements have been made between the United States Geological Survey, through its Hydro-Economic Section, and Professor Chase Palmer, of the Central University of Kentucky, at Danville, for the maintenance of an extended series of chemical examinations of the water of the principal rivers This work is carried on under in that state. an act of congress authorizing the Geological Survey to determine and report upon the water supplies of the United States. Up to the present time comparatively little has been known either of the quantity and quality of Kentucky waters, or of their availability for use in domestic supply, especially in connection with the larger municipalities of the The plan which has recently been put into operation contemplates the periodical examination of the waters of Kentucky River at Jackson, Beattyville, Tyrone, Worthville, Irvine and Frankfort; of Green River at McKinney; of Dix River at Silver Springs and of Salt River at Salvisa. The work is carried on according to the standard methods adopted by the Geological Survey and the chemical profession generally throughout the country, and is under the immediate charge of Mr. M. O. Leighton, hydrographer in charge of the Hydro-economic Section.

UNIVERSITY AND EDUCATIONAL NEWS.

Under the will of Sarah B. Harrison, Yale University is given \$100,000, in memory of her brother, the late Gov. Henry B. Harrison, of Connecticut, who for thirteen years was a member of the Yale corporation. The money is given in trust, the income to be used for such purposes as the university shall desire.

A COLLECTION of fresh water fishes from different parts of Siberia has recently been received by the Zoological Department of Stanford University. The collection consists of several hundred specimens, and was donated by Mr. James F. Abbott, '99, who is now at the University of Chicago.

The collections and library of the late Albert H. Chester, professor of mineralogy and geology at Rutgers College, have been donated to the institution by his son, Mr. A. H. Chester.

It is said that the medical school which was to have been opened at Constantinople on November 6 has been abandoned and that Professor R. Rieder, who was to have been director, has returned to Bonn.

THE Council of the Senate of the University of Cambridge has issued an important recommendation at the instance of the chan-The Duke of Devonshire had called their attention to the expediency of modifying the requirements of the university in respect to classical languages and of enlarging the range of modern subjects. It had further frequently been urged upon the council that changes were necessary, owing to the reorganization of secondary education throughout the country and by recent developments in other universities. The council recommended the appointment of a syndicate, with extensive powers of inquiry and discussion, to consider what changes, if any, are desirable in the studies, teaching and examinations of the university.

The Journal of the American Medical Association states that the well-known 'Military Medical Academy' at St. Petersburg appropriates annually nearly \$800 as a fund for professors in the academy who during the year have published works on their special branches of science. This year it was divided between Professors Bechtereff and Kravkoff, who published manuals respectively on the functions of the brain, and on pharmacology.

Dr. Herbert P. Johnson has been appointed associate professor of bacteriology in the Medical Department of St. Louis University, St. Louis, Mo.

Mr. Franklin D. Barker, formerly head of the Department of Natural Science in Ottawa University, Ottawa, Kans., has been appointed instructor in zoology at the University of Nebraska, Lincoln. He enters at once upon the duties of the new position.

Dr. Howard S. Anders, president of the Pennsylvania Society for the Prevention of Tuberculosis, and lecturer and clinical instructor in physical diagnosis in the Medico-Chirurgical College of Philadelphia, has been made an assistant professor of physical diagnosis in the latter institution.

Dr. Pompecki, of Munich, has been advanced to professor extraordinary in paleontology and geology.